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Oct 14, 1948

Wm. L. Brown
Frank L. L.

T H E
VEGETABLE SYSTEM:
OR, THE
INTERNAL STRUCTURE,
AND THE
LIFE of PLANTS;
Their PARTS and NOURISHMENT Explained;
THEIR
CLASSES, ORDERS, GENERA, and SPECIES,
Ascertained and Described,
In a METHOD altogether NEW:
COMPREHENDING
An ARTIFICIAL INDEX,
AND
A NATURAL SYSTEM.
With FIGURES of all the PLANTS; Designed and En-
graved by the AUTHOR.

The Whole from NATURE only.

By J O H N H I L L, M. D.

V O L III. IV

Containing the whole Classes of PLANTS, with tubulate and ligulated FLOWERS.

L O N D O N :

Printed at the EXPENCE of the AUTHOR,
And Sold by R. BALDWIN, in Pater-Noster-Row.
M.DCC.LXI.

~~Bot 357.59.~~

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H E R B S.

S E R I E S. I.

With UNITED CHIVES.

C L A S S II.

With ASSEMBLED TUBULATED FLORETS DESTITUTE
of RAYS.

Of the Orders or Subdivisions of the SECOND CLASS.

THE Plants of the second Class, altho' very distinct in their appearance from those of the first, are nearly allied to them in nature: the want of rays, tho' a very obvious character, is slightly founded in reality: for a ray is no more than a tubulated Floret, with two of its segments united, and growing out in length: however, as it is a plain, visible, and very obvious mark of difference, it is perfectly suited to be the character of a Class in this artificial Index. It is constant in the greater part of the Genera and Species; but, where it varies, the accident will occasion no disturbance or confusion in our method; for the Bifront Genus, or single Plant, will have its place in both the Classes.

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THE Plants of these two Classes being so much allied, and Nature always similar in like instances, they become subject to the same subdivisions: there are Plants of this Class, with Cups, containing all the differences of the last; and they may therefore be arranged under five orders of the same exact determination.

THE annexed Plate gives instances of all the orders, with the Cups naked, and with their Flowers: and we have here added the construction also of the tubulate Floret. See Plate 87. Fig. 1, 2, 3, 4, 5, 6.----

A Cup is also represented entire at Fig. 7. the same cut open to shew its Receptacle at Fig. 8. and the Receptacle, or general Bed of the Florets at Fig. 9. This repetition may be useful here; at once to impress the distinction of Classes and Orders on the mind. In the succeeding Classes it will not be needful.

THE five Orders of the second Class are exemplified in the following instances.

O R D E R I.

With the general Cup entire, as in the TARCHONANTHUS, Plate 87, Fig. 10. and 15.

O R D E R II.

With the general Cup simple, as in Bidens, Fig. 11. and 16.

O R D E R III.

With the general Cup double, as in COTULA, Fig. 12 and 17.

O R D E R IV.

With the general Cup tiled, as in CONYZA, Fig. 13. and 18.

O R D E R V.

With the general Cup fringed, as in SENECIO, Fig. 14. and 19.

THE first of these figures always expresses the Cup alone: the second with its Florets in it.

H E R B S.

CHARACTERS of the Second Class.

Pl. 37



1
A Tubulated Floret
without its Chives.



2
A Tubulated Floret
with its Chives & Style.



3
A Tubulated Floret
cut open.



4
The Chives separated
from the Floret.



5
The Chives with
the Style?



6
The Chives with
one separated.



7
A
Common Cup.



8
A Cup
with the Receptacle.



9
The
Receptacle?



10
An
Entire Cup.



11
A
Simple Cup.



12
A
Double Cup.



13
A
Tiled Cup.



14
A
Fringed Cup.



15
African Flabane
in its Cup.



16
Hemp Agrimony
in its Cup.



17
Mayweed
in its Cup.



18
Fleabane
in its Cup.



19
Groundsel
in its Cup.

STATE OF NEW YORK

IN SENATE

JANUARY 1, 1903

REPORT

OF THE

COMMISSIONERS OF THE LAND OFFICE

FOR THE YEAR 1902

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1903

STATE OF NEW YORK

THE VEGETABLE SYSTEM. E

H E R B S.

S E R I E S I.

With UNITED CHIVES.

C L A S S II.

With ASSEMBLED TUBULATED FLORETS DESTITUTE
of RAYS.

O R D E R I.

With the GENERAL CUP ENTIRE.

OF this Order we know but one Genus ; and of that
only a single Plant.

G E N U S I.

AFRICAN FLEABANE.

TARCHONANTHUS.

Character of the Genus.

The Cup is rounded at the Base, narrow at the neck, and
cut lightly into seven Segments at the rim.

I. SCENTED AFRICAN FLEABANE.

Plate 88. Fig. 1.

Character of the Species.

Tarchonanthus camphoratus.

The Leaves are rugged, and the Flowers grow in a spike.

Plate 88. Fig. 1. a b.

THIS is a Perennial, native of the Cape of Good Hope, a
weak, but woody Plant, flowering in August. In the wild
state of Nature it lies upon the ground, spreading its slight and
straggling Stalks every way to five or more feet distance ; it is there-

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fore we account it a woody Plant, and not a proper Shrub. In Europe, the gardener's art tying it up to a stick, and trimming off its branches, raises with an upright but single Stem, which, though too weak to stand alone, carries the aspect of a Tree: they err in this, and pervert natural distinctions.

THE Leaves are of a dusky green on the upper side, and white underneath; the Flowers are of a blue purple, but they are seldom perfect with us: though they often shew themselves in Europe what we usually see is nothing more than a head of white and downy Buds. It requires a green-house, and is easily propagated by cuttings.

ORDER II.

With the General Cup simple, or composed of a single row of Scales.

GENUS I.

HEMP AGRIMONY. BIDENS.

Character of the Genus.

The Cup is broad; its Scales are equal, pointed, and hollowed lengthwise.

1. TRIFID HEMP AGRIMONY.

Plate 89. *a a b.*

Plate 89. Fig. 1. COMMON HEMP AGRIMONY.

Character of the Species.

Bidens tripartita.

The Leaves are divided into three parts, and the Seeds stand erect.

Fig. 1. *a b.*

THIS is an Annual, common with us in wet places, flowering in August: it is a yard high. The Stalk is purplish: the Leaves are dark green: the Flowers are yellow. There is a leafy mantle under the Cups, which also many of the other Species have.

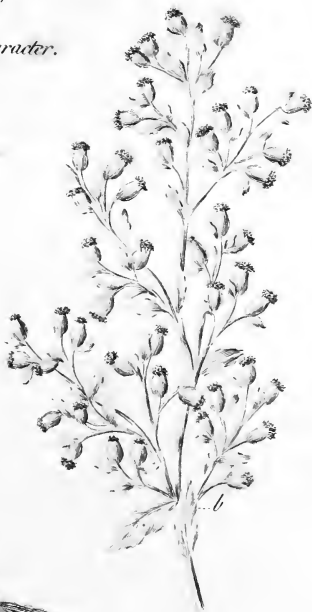
2. CON-

AFRICAN FLEABANE.

Pl. 58.



Generic Character.



Scented African Fleabane ?



2. CONNATE HEMP-AGRIMONY.

Plate 89, Fig. 2. UNDIVIDED HEMP-AGRIMONY.

Character of the Species.

Bidens cernua.

The Leaves grow in pairs, and unite at their Bases, so that the Stalk runs through them

Fig. 2. a b.

THIS also is an Annual, common in wet places, and flowers in July: the Stalk is redish, the Leaves are deep green, and the Flowers are yellow: this has its Cup yellowish in the naked state; and thus we see it about London: in the Isle of Ely it has Rays; we have figured it already in that state, Plate 18, Fig. 1.

3. TWICE WING'D HEMP-AGRIMONY.

Plate 89, Fig. 3.

Character of the Species.

Bidens bipinnata.

The Leaves are twice winged, and their Segments cut again: the Seeds stand divergent.

Fig. 3. a. b.

THIS is an Annual, native of Virginia, and flowers in August: the Leaves are yellowish: the Stalk is branched, and a yard high: the Flowers are yellow. This also is sometimes imperfectly radiated; sometimes very perfectly. See Plate 18.

4. JOINT-FLOWER'D HEMP-AGRIMONY.

Plate 89, Fig. 4.

Character of the Species.

Bidens nodiflora.

The Leaves are undivided: the Stalk splits fork-wise, and the Flowers have no Footstalks.

Fig. 4. a. b c.

THIS is an Annual, native of Bengal, a low Plant, flowering in July. The Stalk is redish, and ten inches high. The Leaves are dark green, and the Flowers are yellow.

5. HAIRY

8. THE VEGETABLE SYSTEM.

5. HAIRY HEMP AGRIMONY.

Plate 89. Fig. 5.

Character of the Species.

Bidens pilosa.

The Leaves are winged and hairy, and the Seeds stand divergent.

Fig. 5. *ab.*

THIS is an Annual, native of America, a Plant of three feet high, flowering in August. The Stalk is brown: the Leaves are dark green, and the Flowers are yellow.

6. SNOWY HEMP AGRIMONY.

Plate 89. Fig. 6.

Character of the Species.

Bidens nivea.

The Leaves are trilobate, but simple toward the top.

The Flowers stand on long Footstalks.

Fig. 6. *ab.*

THIS is a Perennial, native of Carolina, and flowers in June; a very beautiful Plant: it is four feet high: the Stalk is redish: the Leaves are dark green, and rough, and the Flowers are white, but the buds red.

7. DWARF HEMP AGRIMONY.

Plate 89. Fig. 7.

PETTY BIDENS.

Character of the Species.

Bidens Dilleniana.

The Leaves are oval, and the Stalk supports only one Flower.

Fig. 4. *ab.*

THIS is a petty Plant of our own country: it flowers in August: the Stalk is brown: the Leaves are pale green, and the Flowers are yellow.

THE radiated Hemp Agrimonies have been figured before, Plate 18.

GENUS



Generic Character.



Trifol Hemp Agrimony.

Connate Hemp Agrimony.



Twice winged Hemp Agrimony.



Joint flower'd Hemp Agrimony.



Honey Hemp Agrimony.



Hairy Hemp Agrimony.



Dwarf Hemp Agrimony.



G E N U S II.

MAUDLIN.

AGERATUM.

Character of the Genus.

The Cup is long, and drawn in at the mouth: the Scales are numerous, lanced, and equal.

Plate 90. *a a b.*

1. OVAL-LEAV'D MAUDLIN.

Plate 90. Fig. 1.

Character of the Species.

Ageratum ciliare.

The Leaves are oval, obtuse, and crenated; and the Stalk is smooth.

THIS is an Annual, native of Bishnagar, and flowers in August. The Stalk is whitish: the Leaves are of a faint but pleasant green: the Flowers are white.

Fig. 1 *at.*

2. TALL MAUDLIN.

Plate 90. Fig. 2.

Character of the Species.

Ageratum altissimum.

The Leaves are oval, a little hearted at the Base, serrated, and sharp pointed, the Stalk is smooth.

THIS is a Perennial, native of Virginia, and flowers in August: the Stalk is tinged with red: the Leaves are of a dusky green, and the Flowers are white.

Fig. 2. *a b.*

3. HAIRY STALK'D MAUDLIN.

Plate 90. Fig. 3.

Character of the Species.

Ageratum conyzoides.

The Stalk is hairy: the Leaves are oval, sharp pointed, and dented.

Fig. 3. *a. b.*

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THIS is an Annual, native of America, a low Plant, flowering in August : the Stalk is firm and green : the Leaves are dark green ; and the Flowers are white, with a blush of crimson.

G E N U S III.

B U T T E R B U R R.

P E T A S I T E S.

Character of the Genus.

The Cup is egg shaped : the Scales of it are narrow, filmy, numerous, and unequal.

1. OVAL-HEADED BUTTERBURR.

Plate 90. Fig. 4. COMMON BUTTERBURR.

Character of the Species.

Tussilago Petasites dicta

The Flowers are numerous, destitute of Footstalks, and stand in a thick short Spike.

THIS is a Perennial, native of our wet grounds, a Plant of eminent but neglected virtues, flowering in April : the Stalk is ten inches high, thick and reddish, and has a few Films of the same colour : the Flowers are white, with a slight blush of crimson. The Leaves appear as the Flowers fade, and grow to two feet in diameter. The root cures malignant fevers.

Fig. 4. a. b.

2. LONG SPIKED BUTTERBURR.

Plate 90. Fig. 5. FOOTSTALK'D BUTTERBURR.

Character of the Species.

Tussilago hybrida.

The Flowers have long, branchy, and filmy Footstalks.

Fig. 5. a. b.

THIS is a Perennial, native also of our wet grounds, and flowers in March. The Stalk is a foot and a half high, tender, reddish, and filmy. The Flowers are pale crimson : the Leaves are vast, and appear in April and May.

3. LOOSE



*Oval-headed
Maudlin.*



Tall Maudlin.



Hairy stalked Maudlin.



*Oval-headed
Butterbur.*



*Long-spiked
Butterbur.*



Short-spiked Butterbur.

MAUDLIN.

Pl. 90.

Generic Character.

Generic Character.

BUTTERBUR.

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THE VEGETABLE SYSTEM.

3. LOOSE SPIKED BUTTERBURR.

Plate 90. Fig. 6.

Character of the Species.

Tussilago alba.

The Flowers stand in a loose short Spike, on divided naked Footstalks.

Plate 6. *a b.*

THIS is a Perennial, native of Germany, and flowers in April: the Stalk is pale, the Leaves are of a deep green, and the Flowers quite white.

*** LINNÆUS joins the Butterburr and Coltsfoot in one Genus. Nature has connected, not united them. The Plant, Plate 19, N^o. 3. is intermediate between the two Genera.

G E N U S IV.

MAY WEED.

COTULA.

Character of the Genus.

The Cup has two rows of broad, equal, expanded Scales, longer than the Florets.

Plate 91. *a a b.*

1. PINNATIFID MAY WEED.

Plate 91. Fig. 1.

Character of the Species.

Cotula anthemoides.

The Leaves are pinnatifid, and their Segments are subdivided.

Fig. 1. *a b.*

THIS is a Perennial, native of Spain and Italy, and flowers in May; a weak, low, and unregarded Plant, though of sufficient singularity. The Stalks lean on the ground, and are not more than seven or eight inches in length: the Leaves are of a deep and dusky green, and the Flowers are yellow: they are small; but their large Cup, which is often tinged with crimson, renders them conspicuous.

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2. AMPLEXICAUL MAYWEED.

Plate 91. Fig. 2.

Character of the Species.

Cotula coronopifolia.

The Leaves embrace the Stalk, and are pinnatifid with simple Segments.

Fig. 2. *ab.*

THIS is a native of Africa, and of some parts of Europe; an Annual, a low and little regarded Plant, flowering in May and June. The Stalks are weak, and not more than six inches in length: the Leaves are of a brownish green, and the Flowers are yellow.

G E N U S V.

STONEWORT.

V E R B E S I N A.

Character of the Genus.

The Cup is hollowed; the Scales are numerous, slender channel'd, and nearly equal.

Plate 91. *oooab.*

1. DECURRENT STONEWORT.

Plate 91. Fig. 3.

Character of the Species.

Verbesina alata.

The Leaves run down the Stalk.

Fig. 3. *ab.*

THIS is a Perennial, native of Curassô, and flowers in June: the Stalk is brown, and two foot high; the Leaves are of a dusky green, the Flowers are of an orange yellow.

2. LONG FOOTSTALK'D STONEWORT.

Plate 91. Fig. 4.

Character of the Species.

Verbesina pseudo-acmella.

The Leaves stand in pairs, and are lanced and serrated: the Flower-Stalks are long.

Fig. 4. *a. b.*

THIS is an Annual, native of Ceylon, and flowers in June: the Stalk is slender and yellowish: the Leaves are of a yellow green, and the Flowers pale yellow.

3. FORK-

MAYWEED.

Pl. gr.



Generic Character.



Amplexicaul Mayweed.

STONEWORT.

Pinnatifid Mayweed.



Generic Character.



Long footstalk'd Stonewort.

Decurrent Stonewort.



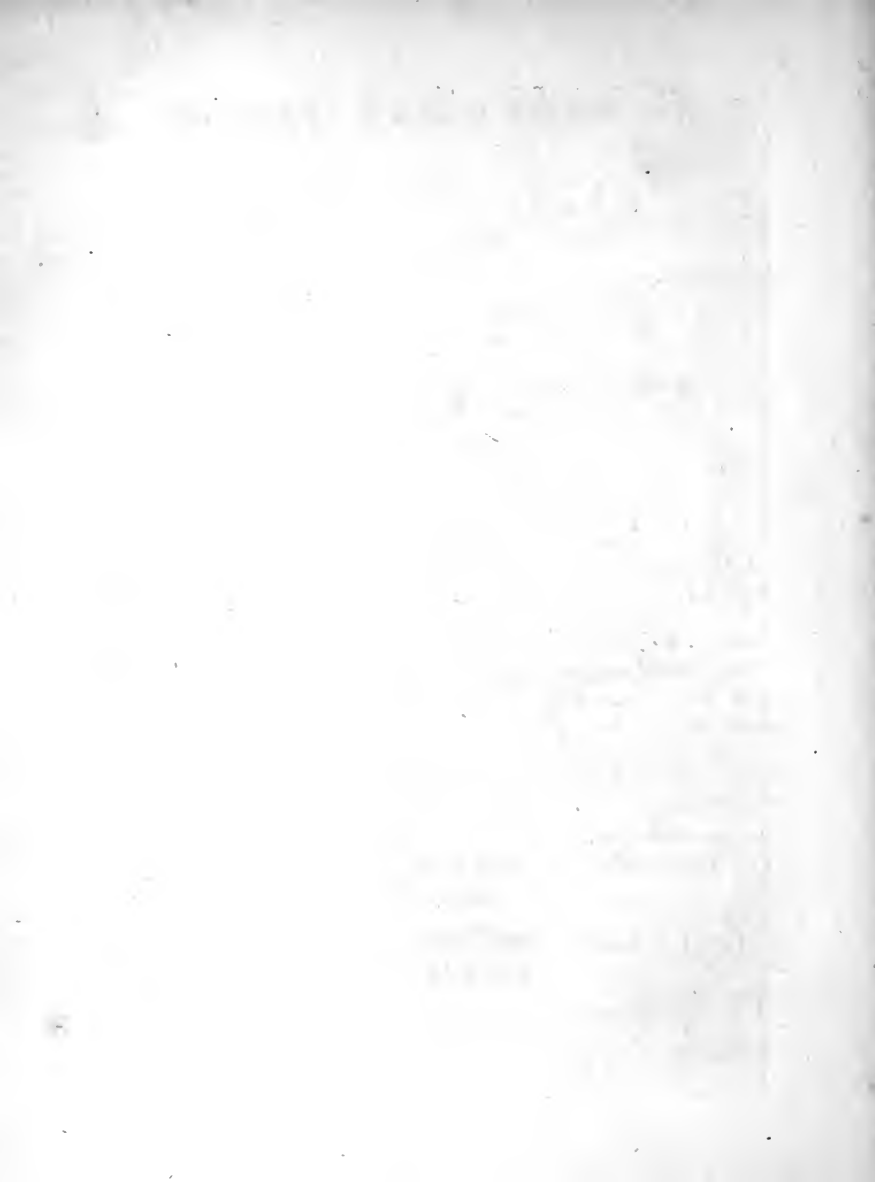
Fork'd Stonewort.



Three-rib'd Stonewort.



White Stonewort.



3. FORKED STONEWORT.

Plate 91. Fig. 5.

Character of the Species.

Verbesina Acmele difta.

The Stalk fplits forkwife : and the Flowers ftand in the divifions : the Leaves have Footftalks.

Fig. 5. *a b.*

THIS alfo is an Annual, native of Ceylon: the famous *Acmele*, whole Seeds cure the gravel: it is a foot and a half high: the Stalks are reddifh: the Leaves are of a fresh green, and the Flowers are yellow.

4. THREE RIB'D STONEWORT.

Plate 91. Fig. 6.

Character of the Species.

Verbesina Lavenia.

The Leaves are oval and fmooth, and have three confpicious ribs.

Fig. 6. *a b.*

THIS is an Annual, native of Ceylon, and flowers in July: the Stalk is two feet high, and brownifh: the Leaves are of a fresh green, and the Flowers are yellow.

5. WHITE STONEWORT.

Plate 91. Fig. 7.

Character of the Species.

Verbesina alba.

The Leaves ftand in pairs: they are lanced, and fharply ferrated.

Fig. 7. *a b.*

THIS is a Biennial, native of Virginia, and flowers in Auguft: it is a foot high: the Leaves are fresh green: and the Flowers are white.

The radiated *Verbesinas* have been defcribed in the Second Volume.

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O R D E R IV.

With the general Cup tiled, or composed of several series of Scales.

G E N U S I.

1. LAVENDER COTTON.

S A N T O L I N A.

The Cup is hæmispheric; its Scales are oblong, oval, and unequal, with sharp tops turning inward.

1. SQUARE LEAV'D LAVENDER COTTON.

Plate 92. *a a b.*

Plate 92. Fig. 1. FEMALE SOUTHERNWOOD, or LAVENDER COTTON.

Character of the Species.

Santolina chamæcyparissus.

The Leaves are square and dented: the Flowers stand single.

Fig. 1. *a b.*

THIS is a small perennial woody Plant; a native of the warmer parts of Europe, and flowers at Midsummer: the Leaves are of an ashy green, and strong scented. The Flowers are small and pale.

2. SINUATED LAVENDER COTTON.

Plate 92. Fig. 2.

Character of the Species.

Santolina dentata.

The Leaves are sinuated; and the Flowers grow in a compound cluster.

Fig. 2. *a b.*

THIS

THIS is a Perennial woody Plant, native of Æthiopia, and flowers throughout the year: the Bark is pale; the Leaves on the lower part of the shoots are deeply divided, long and narrow: those toward the tops are broader, and but lightly notched: the Flowers are yellow.

3. ROSEMARY LEAV'D LAVENDER COTTON.

Plate 92. Fig. 3.

Character of the Species.

Santolina Rosmarini-folia.

The Leaves are linear and dented, the Flowers stand on long Footstalks.

Fig. 3. *a. b.*

THIS is a Perennial woody Plant, native of Spain, and flowers all Autumn: the Stem is brown: the branches are green: the Leaves are of a deep green: the Flowers are yellow.

4. THREE-FORK'D LAVENDER COTTON.

Plate 92. Fig. 4.

Character of the Species.

Santolina trifurca.

The Leaves are wedg'd, and cut in three at the end: the Flowers grow in a simple cluster.

THIS is a Perennial, native of Æthiopia, a woody Plant, flowering all the year. The Boughs are variously divided; but all their tops are crowned with clusters of large golden Flowers on simple Footstalks.

5. SAMPHIRE LEAV'D LAVENDER COTTON.

Plate 92. Fig. 5.

Character of the Species.

Santolina crithmifolia.

The Leaves are linear, and cut in threes: the Flowers stand in a single cluster.

Fig. 5. *ab.*

THIS is an Æthiopian woody Plant, six feet high; flowering at all seasons. The Leaves are of a faint green; they are cut into three at the end. The Flowers are large and yellow.

6. JAGGED

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6. JAGGED CUP'D LAVENDER COTTON.

Plate 92. Fig. 6.

Character of the Species.

Santolina crenata.

The Scales of the Cup are jagged : one Flower stands at the top of the Plant.

Fig. 6. *a b.*

THIS also is an Æthiopian : the Leaves are of a faint blue green : the shoots are tough : the Flower is yellow.

7. ANNUAL LAVENDER COTTON.

Plate 92. Fig. 7.

Character of the Species.

Santolina annua.

The Leaves are pinnatifid, and the Lobes cut : the Flowers stand in a simple spike.

Fig. 7. *a b.*

THIS is an African. The Stalk is tender, the Leaves are pale green ; the Flowers are yellow.

G E N U S. II.

T A N Z Y.

T A N A C E T U M.

Character of the Genus.

The Cup is rounded at the Base, and cylindric upwards ; and is composed of sharp pointed, narrow, and equal Scales, placed close, with the tops strait.

Plate 93. Fig. *a a b.*

1. T W I C E W I N G ' D T A N Z Y.

Plate 93. Fig. 1.

COMMON TANZY.

Character of the Species.

Tanacetum vulgare.

The Leaves are winged, and the Leaflets winged again, and jagged.

Fig. 1. *a b.*

THIS



Generic Character.



Square leaved
Lavender Cotton.



Rosemary leaved
Lavender Cotton.



Sampshire leaved
Lavender Cotton.

Jaggid Cup'd
Lavender Cotton.



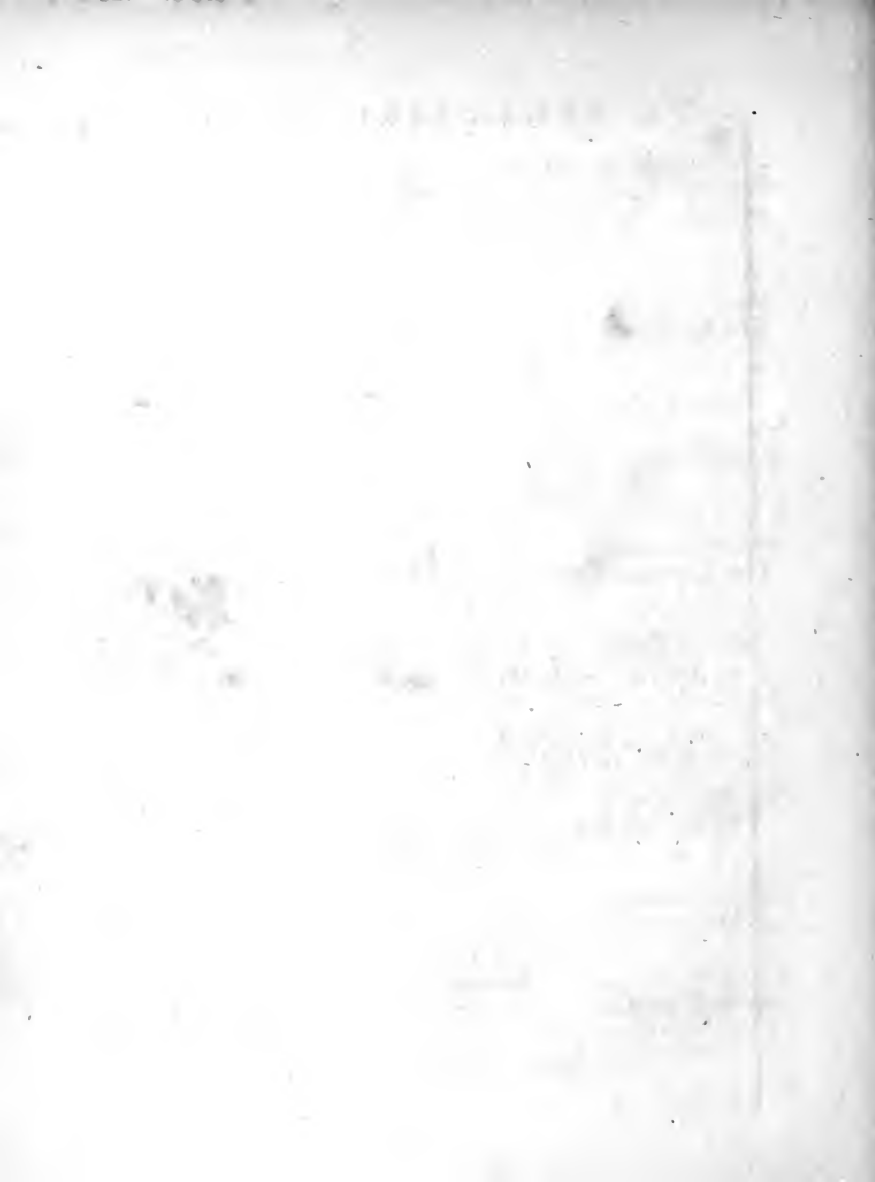
Sinuated Lavender Cotton.



Three forked
Lavender Cotton.



Annual
Lavender Cotton.



THE VEGETABLE SYSTEM. 17

THIS is a Perennial, native of the northern parts of Europe, and flowers in August : the Leaves are of a fine green : the Stalk is a yard high : the Flowers are of a bright yellow.

2. PINNATIFID TANZY.

Plate 93. Fig. 2.

Character of the Species.

Tanacetum frutescens.

The Leaves are pinnatifid, and the Segments are undivided and obtuse.

Fig. 2. *a b.*

THIS is a woody Plant, native of Æthiopia. The Stem is grey : the Shoots are green : the Leaves are of a bluish green. The Flowers are of a delicate yellow.

3. FORKED TANZY.

Plate 93. Fig. 3.

Character of the Species.

Tanacetum crithmi folium.

The Leaves are winged, and forked ; the Leaflets linear, and far asunder.

Fig. 3. *a b.*

THIS is a Perennial, native of the Cape ; and flowers great part of the year : the Stem is brown : the young Shoots are redish : the Leaves are fresh green, and the Flowers are yellow.

4. WOOLLY HEADED TANZY.

Plate 93. Fig. 4.

SOFT GOLDBLOCKS.

Character of the Species.

Tanacetum annuum.

The Leaves are twice pinnatifid ; the heads of the Flowers are downy.

Fig. 4. *a b c.*

THIS is an Annual, native of the South of Europe ; the Leaves are pale green. The Stalk is two feet high : the Flowers are yellow.

5. FINE WING'D TANZY.

Plate 93. Fig. 5.

Character of the Species.

Tanacetum Sibiricum.

The Leaves are winged, the Leaflets linear, and the Florets are cut slightly.

Fig. 5. *a b.*
THIS

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THIS is a Perennial, native of the colder regions: the Stalk is two feet high: the Leaves are of a pale green: the Flowers are yellow.

6. DOWNY TANZY.

Plate 93. Fig. 6.

Character of the Species.

Tanacetum incanum.

The Leaves are twice winged, and downy: the Flowers form an oval cluster.

Fig. 6. *a b.*

THIS is a Perennial, native of the East, and flowers in Autumn: the Stalk is a yard high, the Leaves are downy: the Flowers are yellow, and grow in upright oval clusters.

7. FEATHERY TANZY.

Plate 93. Fig. 7.

Character of the Species.

Tanacetum suffruticosum.

The Leaves are cut into feathery Segments in the winged manner.

Fig. 7. *a b.*

THIS is a Perennial, a woody Plant, native of Æthiopia. The Stem is brown, and the young Shoots are green; the Leaves are pale, and the Flowers are small and yellow.

8. OVAL-LEAV'D TANZY.

Plate 93. Fig. 8.

COSTMARY.

Character of the Species.

Tanacetum balsamita dictum.

The Leaves are oval and undivided.

THIS is a Perennial, native of Tuscany. The Leaves are of a fine green. The Flowers are yellow: the Plant is four feet high, upright, and not branched.

TANZY.

Pl. 93.

General Character.



Twice wing'd Tanzy.



Pinnatifid Tanzy.



Fork'd Tanzy.



Woolly-headed Tanzy.



Five wing'd Tanzy.

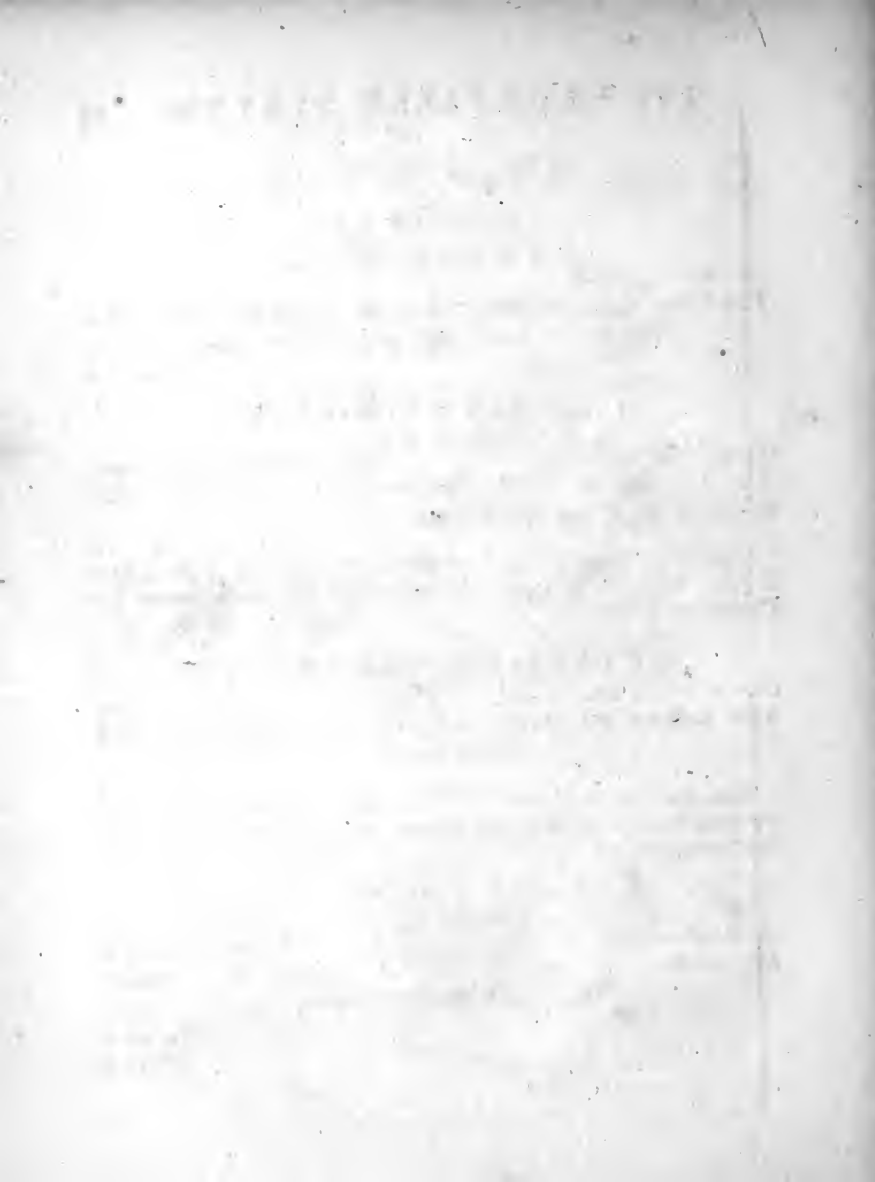


Ovat-lanceol Tanzy.



Downy Tanzy.

Feathery Tanzy.



G E N U S III.

GOLDILOCKS.

CHRYSOCOMA.

Character of the Genus.

The Cup is hæmispheric, but spreads at the top; the Scales are lanced, and placed very even.

Plate 94. *a a b.*

1. LINEAR GOLDILOCKS.

Plate 94. Fig. 1.

Character of the Species.

Chrysocoma linofyris dicta.

The Leaves are linear, but have some breadth: the Scales of the Cups stand loose.

Fig. 1. *a b.*

THIS is a Perennial, native of the south of Europe, and flowers in July: the Stalk is redish, the Leaves are of a fresh green: the Flowers are yellow.

2. EYELASH'D GOLDILOCKS.

Character of the Species.

Chrysocoma ciliata.

The Leaves are simple, rugged, and edged with stiff short Hairs.

Fig. 2. *a b.*

THIS is a Perennial, native of Æthiopia. The Stem is brown: the Branches are redish: the Leaves are of a ruddy green; the Flowers are yellow.

3. GRASSY GOLDILOCKS.

Plate 94. Fig. 3.

Character of the Species.

Chrysocoma gramini folia.

The Leaves are lanced, but very long: the Flowers stand in a divided cluster.

Fig. 3. *a b.*

THIS

20 THE VEGETABLE SYSTEM.

THIS is a Perennial, native of America, and flowers in Autumn. The Stalk is two feet high : the Leaves are grassy ; the Flowers are yellow.

4. HAIRY GOLDSLOCKS.

Plate 94. Fig. 4.

Character of the Species.

Chrysocoma villosa.

The Leaves are lanced and hairy, and the Cups are slender.

Fig. 4. *a b.*

THIS is a perennial, native of Siberia, a tall slender Plant. The Stalk is grey ; the Flowers are pale yellow.

5. DECURRENT GOLDSLOCKS.

Plate 94. Fig. 5.

Character of the Species.

Chrysocoma-coma aurea dicta.

The Leaves are linear, and run down the Stalk.

Fig. 5. *a b.*

THIS is a Perennial, an Æthiopian Plant, with gold yellow Flowers. The Stem is brown ; the young Shoots purple, and the Leaves are of a fine green.

6. DROOPING GOLDSLOCKS.

Plate 94. Fig. 6.

Character of the Species.

Chrysocoma cernua.

The Leaves are linear and hairy : the Buds of the Flowers droop.

Fig. 6. *a. b.*

THIS is a woody Plant of Æthiopia : the Stem is brown : the Shoots are green : the Leaves are linear, of a fine green, but pale underneath : the Flowers are yellow.

7. DOTTED GOLDSLOCKS.

Plate 94. Fig. 7.

Character of the Species.

Chrysocoma biflora.

The Leaves are lanced ; they have three strong Ribs, and are dotted with black.

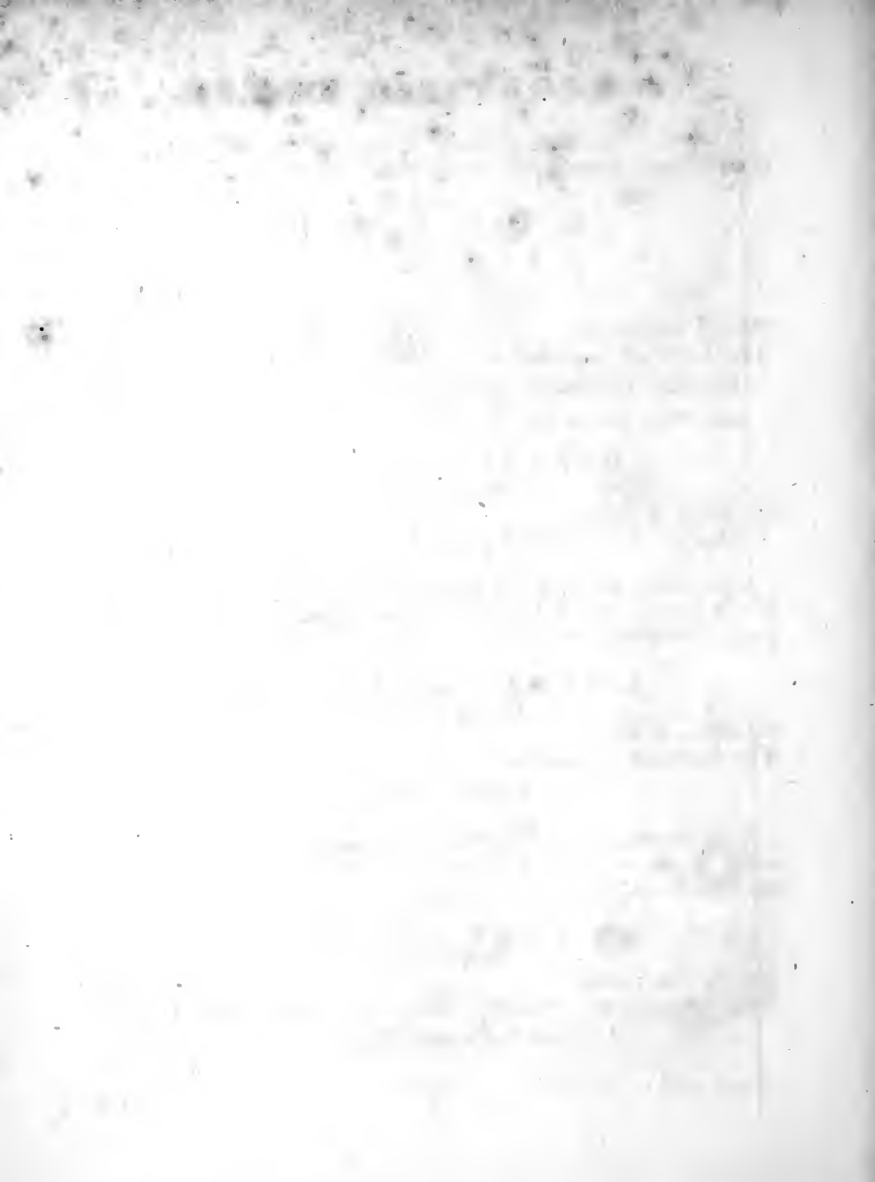
Fig. 7. *a b.*

THIS

GOLDLOCKS.

Pl. 94





THIS is a Perennial, native of Siberia, a Plant of a yard high : the Leaves are green, with brown spots : the Flowers are yellow.

G E N U S IV.

F L E A B A N E.

C O N Y Z A.

Character of the Genus.

The Cup is rounded at the bottom, but contracts, and becomes cylindric upwards : its Scales are pyramidal, and turn out at the points.

1. AMPLEXICAUL FLEABANE. Plate 95. *a a b*.

Plate 95. Fig. 1.

Character of the Species.

Conyza bifrons.

The Leaves are oblong, oval, and embrace the Stalk.

Fig. 1. *a. b.*

THIS is a native of the Pyrenæan mountains, and of Canada. It is a Perennial, four feet high. The Leaves are of a brownish green, and the Flowers yellow.

2. TORTUOUS FLEABANE.

Plate 95. Fig. 2.

Character of the Species.

Conyza tortuosa.

The Stem is wreathed : the Leaves are oval, and the Flowers droop.

Fig. 2. *a b c.*

THIS is a woody Plant, native of Madagascar : the Stem is reddish : the Shoots are green : the Leaves are of a fresh green, and the Flowers are yellow.

3. HAIRY FLEABANE.

Plate 95. Fig. 3.

Character of the Species.

Conyza hirsuta.

The Leaves are oblong, oval, and undivided, rugged and hairy underneath.

Fig. 3. *a. b.*

22 THE VEGETABLE SYSTEM.

THIS is a Perennial, native of China: the Stem is pale: the Leaves are also pale, and hairy underneath. The Flowers are yellow.

4. BROWN FLEABANE.

Plate 95. Fig. 4.

PLOWMAN'S SPIKENARD.

Character of the Species.

Conyza aquarrosa.

The Leaves are lanced, rugged, and sharp pointed: the Cups are rough.

Fig. 4. *a b c.*

THIS is an Annual, native of our way sides, and flowers in June. The Leaves are broad, rough and brown: the Flowers are yellow. The Plant is three feet high.

5. SOFT-LEAV'D FLEABANE.

Plate 95. Fig. 5.

Character of the Species.

Conyza bifoliata.

The Leaves are downy, oval, and indented: two grow with each Flower.

Fig. 5. *a b.*

THIS is a native of the Indies, a foot and a half high. The Leaves are of a grey green: the side Shoots only have two small Leaves, placed opposite. The Flowers are crimson.

6. SLENDER STALK'D FLEABANE.

Plate 95. Fig. 6.

Character of the Species.

Conyza Chinenfis.

The Leaves are lanced, ferrated, and downy: the Flowers stand only on the top.

Fig. 6. *a b.*

THIS is an Annual, native of China. The Leaves are broad: the Stalk is two feet and a half high. The Leaves are hoary underneath. The Flowers are yellow.

7. GREY FLEABANE.

Plate 95. Fig. 7.

Character of the Species.

Conyza cinerea.

The Leaves are oblong, and the Flowers grow in a branchy flat cluster.

Fig. 7. *a b.*

THIS

FLEABANE.

pl. 03.



Generic Character.



Amplexicaul
Fleabane?



Tortuous Fleabane?



Brown Fleabane?



Soft leaved
Fleabane.



Slender stalked
Fleabane.



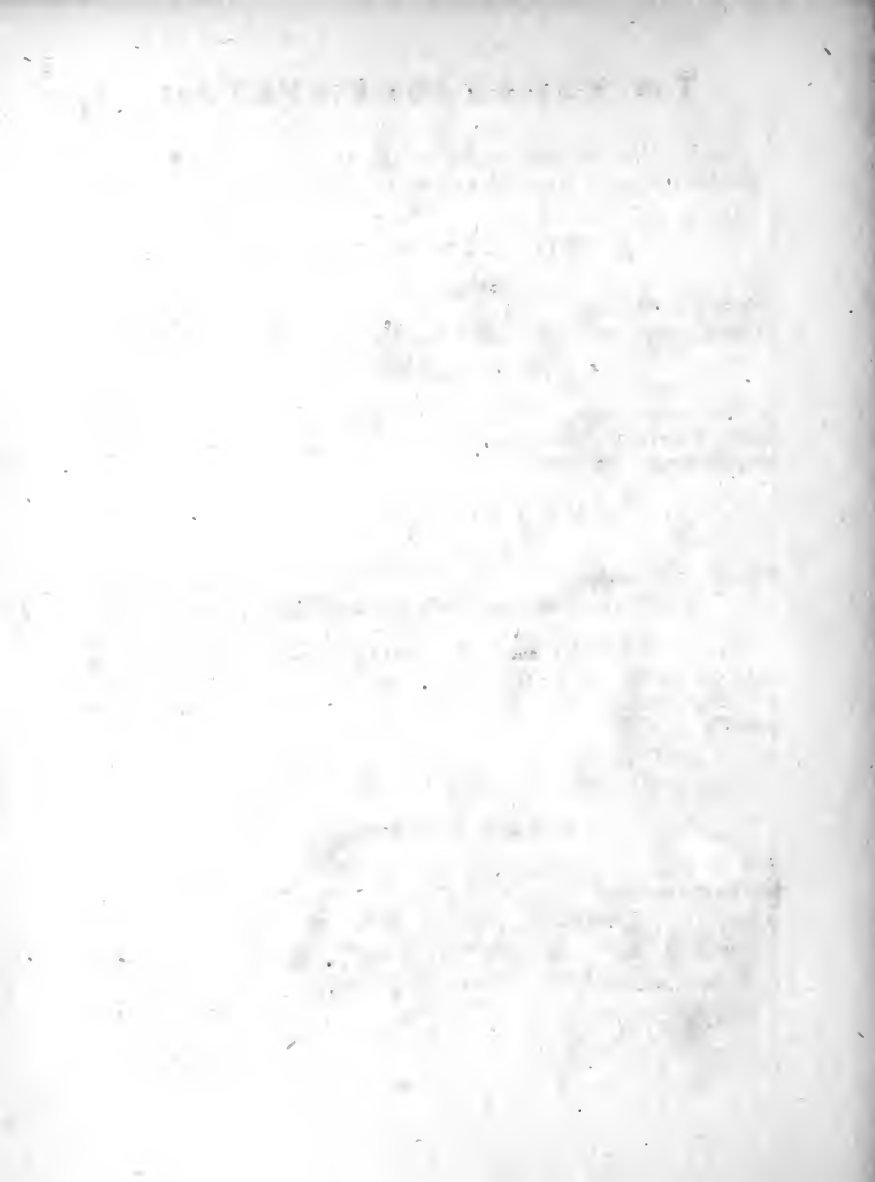
Grey Fleabane.



Woolly Fleabane.



Lobed
Fleabane.



THIS is an Annual, native of the Indies, a yard high. The Leaves are of a greyish green : the Flowers are yellow.

8. WOOLLY FLEABANE.

Plate 95. Fig. 8.

Character of the Species.

Conyza candida.

The Leaves are egg'd and woolly : the Flowers grow on the top and branches.

Fig. 8. *a b.*

THIS is a native of Crete, a perennial woody Plant of two feet high, flowering all Summer. The Leaves are of a white green : the Flowers are yellow.

9. LOBATED FLEABANE.

Plate 95. Fig. 9.

Character of the Species.

Conyza lobata.

The Leaves are cut into three divided Lobes.

Fig. 9. *a b.*

THIS is a woolly Plant, native of Vera Cruz. The Leaves on their lower parts are divided deeply into three : those near the top are simple and entire : they are a pale green : the Flowers are yellow.

G E N U S. V.

S P I K E N A R D.

B A C C H A R I S.

Character of the Genus.

The Cup is cylindric, and composed of narrow, linear, pointed Scales, which stand upright, and have their Points armed with a harmless Spine.

Plate 95. *a a b.*

1. DEEP

THE VEGETABLE SYSTEM.

1. DEEP-CUT SPIKENARD.

Plate 6. Fig. 1.

Character of the Species.

Baccharis ivæfolia.

The Leaves are lanced ; and very sharply, and deeply indented. The Stem is woody.

Fig. 1. *a b.*

THIS is a robust Plant, native of North and South-America: the woody Stem is redish: the Leaves are deep green: the Flowers are white. It flowers all Summer.

2. OVAL-LEAV'D SPIKENARD.

Plate 96. Fig. 2.

Character of the Species.

Baccharis Indica.

The Leaves are oval, and lightly dented: the Flowers grow in a vast regular cluster.

Fig. 2. *a b.*

THIS is a Perennial, native of the East-Indies, and flowers all the year: the Stem brown: the Leaves are pale green: and the Flowers are yellow,

3. SLIGHT DENTED SPIKENARD:

Plate 90. Fig. 3.

Character of the Species.

Baccharis neriifolia.

The Leaves are lanced, and have a dent or two near their points.

Fig. 3. *a b.*

THIS is an Æthiopian woody Plant, flowering in Autumn: the Stem is pale. The young Shoots are green: the Leaves are of a fresh green: the Flowers are yellow.

4. BLUE-GREEN SPIKENARD.

Plate 96. Fig. 4.

Character of the Species.

Baccharis halimifolia.

The Leaves are egg-shaped and dented, deepest toward the end.

Fig. 4. *a b.*

THIS

SPIKENARD.



Generic Character.



Deep-cut Spikenard.



Coal-leaved Spikenard.



Slight dented Spikenard?



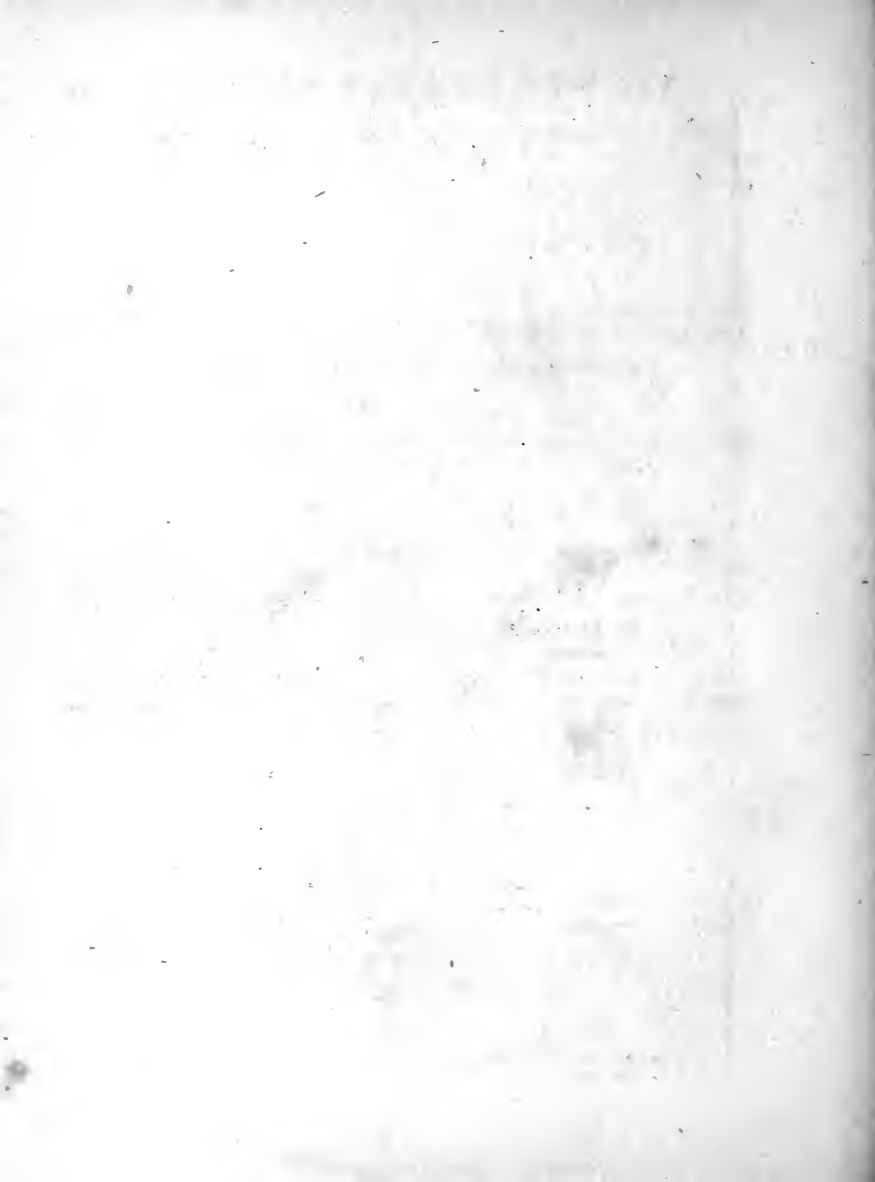
Blue-green Spikenard?



Thin leaved Spikenard.



Field Spikenard?



THIS is a Perennial, native of Virginia : it flowers toward the end of Summer. The Stalk is two feet high : the Leaves are dusky : the Flowers are yellow.

5. THIN LEAV'D SPIKENARD.

Plate 96. Fig. 5.

Character of the Species.

Baccharis tenuifolia.

The Leaves are lanced, but somewhat oval ; they are remarkably thin : the Stem is woody.

Fig. 5. *a b.*

THIS is a woody African Plant, flowering at all seasons : the Stem is purplish, and the young Shoots are paler. The Leaves are of a faint green, and the Flowers of a pale red.

6. FOETID SPIKENARD.

Plate 96. Fig. 6.

Character of the Species.

Baccharis foetida.

The Leaves are lanced, and very deeply cut ; the tufts of Flowers have a leafy Base.

Fig. 6. *a b.*

THIS is a robust and woody Plant of North-America. The Stem is brown : the young Shoots are green : the Leaves are of a strong green : the Flowers are small and redish.

G E N U S VI.

D U T C H A G R I M O N Y .

E U P A T O R I U M .

Character of the Genus.

The Cup is oblong, and composed of upright, swelling, and sharp pointed Scales of irregular lengths.

a Those with four Flowers in each Cup.

1. LINEAR DUTCH AGRIMONY.

Plate 97. Fig. 1.

Character of the Species.

Eupatorium hyssopifolium.

The Leaves are linear, and have three strong Ribs.

Fig. 1. a. b.

THIS is a singular, though but inelegant Plant, native of Virginia and Canada, and flowers from June to October. The first Leaves are long, narrow, and obtuse, and divided at the edges, harsh to the touch, and of a dusky green. The Stalk is hard, brittle, ridg'd, of a whitish green, and two feet or more in height: its Leaves are oblong and narrow; but they swell a little toward the middle: they are of the same harsh green with those from the root, and have three conspicuous ribs: they are less obtuse than those from the root, and intirely undivided at the edges: the Stalk, and lower Leaves are slightly hairy: those toward the top of the Plant less so. The Flowers are small and white.

2. CLUSTERY DUTCH AGRIMONY.

Plate 97. Fig. 2.

Character of the Species.

Eupatorium scandens.

The Stalk twists about other Plants: the Leaves are heart-ed, and boldly cut at the edges.

Fig. 2. a b.

THIS Species, which is singular and handsome both, is a native also of Virginia; common in wet places, and flowers all the latter part of summer: it is a Perennial, with a weak long Stalk, which, supporting itself by twining about whatever is near it, often rises to a very considerable height. The Leaves are large, and of a delicate green, heart-shaped, indented at the edges, and sharp-pointed: the Flowers grow in little tufts at the top of all the branches, and are of a very delicate crimfon.

3. EGG-

DUTCH AGRIMONY.

Pl. 07.



Generic Character.



Linear Dutch Agrimony.



2 Clustery Dutch Agrimony.



Egg-leaved Dutch Agrimony.



3. EGG-LEAV'D DUTCH AGRIMONY.

Plate 97. Fig. 3.

Character of the Species.

Eupatorium houstonianum.

The Stalk climbs, and the Leaves are egg-shaped, and undivided at the edges.

Fig. 3. a b.

THIS is a Perennial, native of Vera Cruz, and flowers in a succession many months, though not with any great beauty. The Stalk is round, but edged a little; weak, but tough; and, twining about any thing, will rise to a very considerable height; sometimes ten or twelve feet. The Leaves are of a fine glossy green: their shape is oval, and their ribs are conspicuous, and often tinged with red. The Flowers grow upon the tops of all the Branches, not in tufts, but in loose inconsiderable spikes, and are of a pale, but delicate crimson.

DUTCH AGRIMONY.

b Those which have five Flowers in each Cup.

AURICULATED DUTCH AGRIMONY.

Plate 98. Fig. 1.

Character of the Species.

Eupatorium Zeylanicum.

The Leaves are egg-shaped, but they have a kind of ears at the Base, which give them a speary form.

Fig. 1. a b.

THIS is a tall Plant, native of Ceylon: the first Leaves are of a deep green: they have on each side, near the Base, a small slip of a leafy matter in the manner of an ear. The Stalk is of a whitish green: its Leaves are of a strong green. The Flowers are small and crimson.

2. AMPLEXICAUL DUTCH AGRIMONY.

Plate 98. Fig. 2.

Character of the Species.

Eupatorium sessilifolium.

The Leaves are roundish, but somewhat lanced, and embrace the Stalk.

Fig. 2. a. b.

THIS

28 THE VEGETABLE SYSTEM.

THIS is a native of Virginia, and flowers all summer : the Stalk is green and tender : the Leaves are of a pale green : they surround the Stalk. The Flowers are weak, but of a delicate crimson.

3. TRIFOLIATE DUTCH AGRIMONY.

Plate 98. Fig. 3.

Character of the Species.

Eupatorium trifoliatum.

The Leaves are lanced, ferrated, and have Footstalks ; and they grow three together.

Fig. 9 a b.

THIS is a native of Virginia, an autumnal flowering Plant. The Stalk is a yard high, of a deep green, tinged with red. The Leaves are deep green : the Flowers are crimson.

4. FINGER'D DUTCH AGRIMONY.

Plate 98. Fig. 4.

COMMON DUTCH AGRIMONY.

Character of the Species.

Eupatorium cannabinum.

The Leaves are fingered, or grow several together from one point.

Fig. 4. a b.

THIS is a Perennial, native of our ditch sides, a specious Plant, covered with Flowers in Autumn. The Stalk is five feet high : the Leaves are of a fresh green : the Flowers are of a pale, but very delicate crimson.

5. TALL DUTCH AGRIMONY.

Plate 98. Fig. 5.

Character of the Species.

Eupatorium altissimum.

The Leaves are lanced, and have strong Ribs : the Stem is woody.

Fig. 5. a b.

THIS is a Perennial, native of Pensilvania : the Stem is woody : the Branches are pale : the Leaves are of a fresh fine green : the Flowers are white.

6. FEW-

DUTCH AGRIMONY.

2.

Pl. yd.



Auriculated
Dutch Agrimony.



Anplacicaul
Dutch Agrimony.



Trifoliolate
Dutch Agrimony.



Finger'd
Dutch Agrimony.



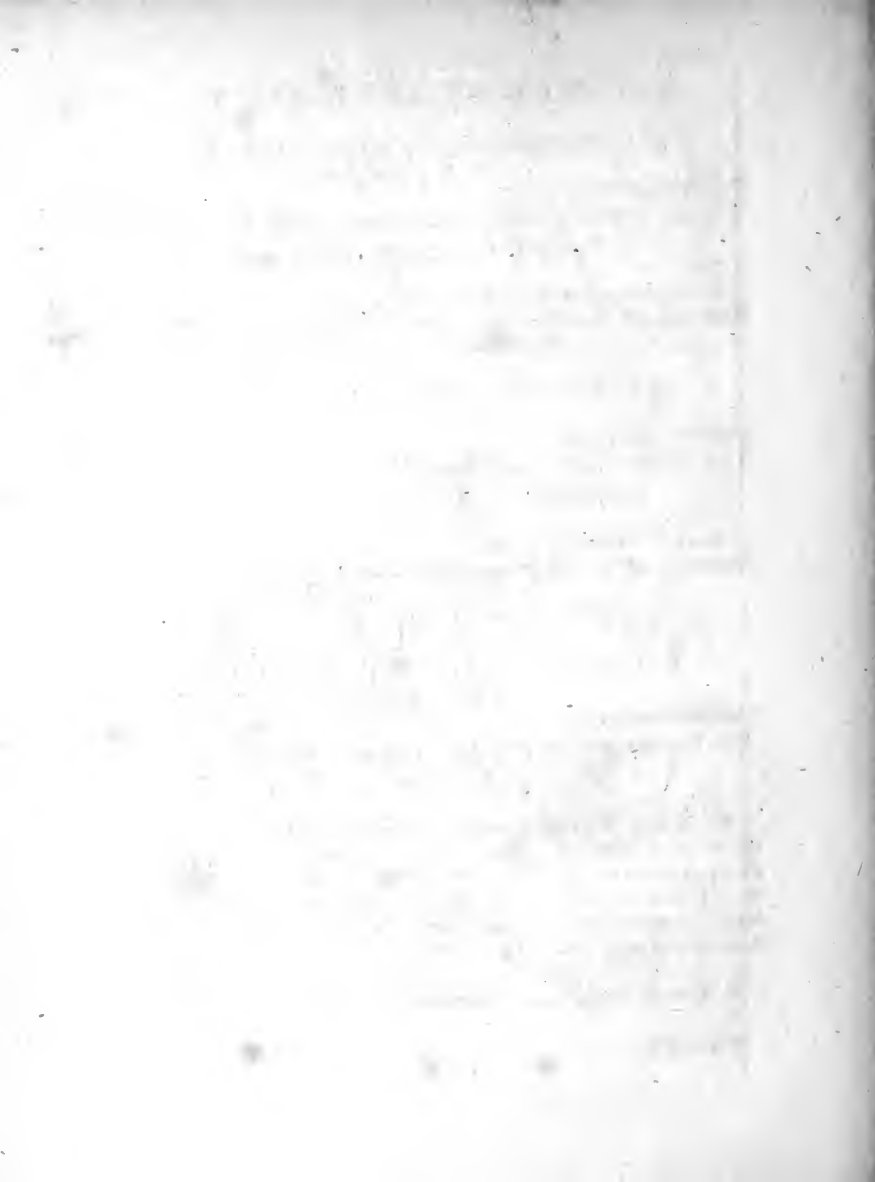
Tall
Dutch Agrimony.



Few-leav'd
Dutch Agrimony.



Five cut
Dutch Agrimony.



6. FEW-LEAV'D DUTCH AGRIMONY.

Plate 98. Fig. 6.

Character of the Species.

Eupatorium Chinense.

The Leaves are oval, deeply cut, and have Footstalks: they stand remote on the Stalk.

Fig. 6. *a b.*

THIS straggling Plant is a native of the southern parts of China, flowering all Autumn: the Stem is of a pale green: the Leaves are of a fresh green: the Flowers are of a pale crimson.

7. FINE CUT DUTCH AGRIMONY.

Plate 68. Fig. 6.

Character of the Species.

Eupatorium sessilifolium.

The Leaves have no Footstalks: they are lanced finely ferrated, and embrace the Stalk.

Fig. 6. *a b.*

THIS is a Perennial, native of Virginia, a tall robust Plant. The Leaves are of a fresh green. The Flowers are white.

c With eight Flowers in each Cup.

1. CRIMSON DUTCH AGRIMONY.

Plate 99. Fig. 1.

Character of the Species.

Eupatorium purpureum.

The Leaves are lanced and rugged, and have Footstalks: they grow several at a Joint.

Fig. 1. *a b.*

THIS is a Perennial, native of North-America, a robust Plant the Stalk is four feet high, of a deep green, and spotted with a dusky crimson. The Leaves stand three or more at a Joint, and are deep green: the Flowers are of a pure white, and have the Cups lightly tinged with red, and the Chives and Styles are red, which stand out beyond the Petals.

d Those which have numerous Flowers in each Cup.

30 THE VEGETABLE SYSTEM.

2. VIOLET DUTCH AGRIMONY.

Plate 99. Fig. 2.

Character of the Species.

Eupatorium coelestinum.

The Leaves are oval, and hearted at the Base, and are bluntly ferrated, and placed on Footstalks.

Fig. 2. a b.

THIS is a Perennial, native of Virginia, an elegant Plant: the Stalk is four feet high: the Leaves are of a delicate and shining green: the Flowers are large, and of a violet blue.

3. SWEET DUTCH AGRIMONY.

Plate 99. Fig. 3.

Character of the Species.

Eupatorium aromaticum.

The Leaves are oval, bluntly ferrated, and placed on Footstalks: they have three great Ribs: the Cups are very smooth.

Fig. 3. a b.

THIS is a Perennial, native of Virginia, and flowers in Autumn: the Stalk is slender, and a yard and a half high. The Leaves are of a very strong green, somewhat rough on the surface: they have three principal and conspicuous Ribs. The Flowers are white, and have long tubes: the Cup is singular: the several series of Scales are less distinct than in the others. In the order of Nature it joins the *Ageratum* and *Eupatoriums*. The whole Plant has an aromatic scent.

4. CONNATE DUTCH AGRIMONY.

Plate 99. Fig. 4.

Character of the Species.

Eupatorium perfoliatum.

The Leaves grow together at their Bases, and the Stalk grows through them.

Fig. 4. a b.

THIS is a Perennial, native of Virginia, and flowers all Summer: the Stalk is upright, and near a yard high: the Leaves are of a pale green, and soft; sharp pointed and indented along the edges. The Flowers are of a very pale crimson: they stand in small loose tufts at the top of the Stalk, and of the Branches.

GENUS

DUTCH AGRIMONY.

3

1799.



*Crimson Dutch
Agrimony.*



Violet Dutch Agrimony.



Sweet Dutch Agrimony.



Connate Dutch Agrimony.



G E N U S VII.

MUGWORT.

A R T E M I S I A.

The Cup is short and oval, composed of rounded Scales, turning in at the points, and laid closely over one another ; and there is a kind of approach toward Rays in the Flower.

Plate 100. *a a.*

LINNÆUS first united the Wormwoods and Mugworts in one Genus; and it is done with justice. The Characters are most distinct in the Mugworts ; and it has therefore a right to be continued as the generic name.

1. SHARP-CUT MUGWORT.

Plate 100. Fig. 2.

COMMON MUGWORT.

Character of the Species.

Artemisia vulgaris.

The Leaves are pinnatifid, flatted, sharp cut, and white underneath. The Flowers stand in simple clusters.

Fig. 1. *a b.*

THIS is a Perennial, native of our dry waste grounds ; a tall, robust, well-looking Plant, of four feet high. The Leaves are of a dark green on the upper side, and white underneath. The Flowers stand in long simple spikes, and are brown.

2. GREAT FLOWERED MUGWORT.

Plate 100. Fig. 2.

Character of the Species.

Artemisia rupestris.

The Leaves are cut into fine linear Segments: the Flowers are large and open.

Fig. 2. *a b.*

THIS

32 THE VEGETABLE SYSTEM.

THIS is a woody low Plant, native of Sweden and Siberia. The Stem is whitish, and six inches high. The Leaves are silvery: the Flowers are tinged lightly with purple.

3. ROMAN MUGWORT.

Plate 100. Fig. 3. ROMAN WORMWOOD.

Character of the Species.

Artemisia Pontica.

The Flowers hang drooping, and are roundish: the Leaves are finely cut, and whitish underneath.

Fig. 3. *a b.*

THIS is the true Roman Wormwood: it is a native of Europe and the East. The Stem is woody, brown, and two feet high: the Leaves are of a whitish green: the Flowers are roundish and brown.

4. WORMWOOD MUGWORT.

Plate 100. Fig. 4. COMMON WORMWOOD.

Character of the Species.

Artemisia Ablynthium dicta.

The Leaves are cut into broad Segments, in the pinnatifid manner; and the Segments are crenated.

Fig. 4. *a b.*

THIS is a Perennial, native of our waste grounds, every where; it is a yard high: the Leaves are of a pale greyish green: the Flowers are brown.

5. LANCED LEAV'D MUGWORT.

Plate 100. Fig. 5. TARRAGON.

Character of the Species.

Artemisia dracunculus dicta.

The Leaves are simple, smooth, lanced, and undivided.

Fig. 5. *a b.*

THIS is a Perennial, native of Tartary; two feet high. The Leaves are of a fine green: the Flowers are brown.

6. GREEN FLOWER'D MUGWORT.

Plate 100. Fig. 6.

Character of the Species.

Artemisia tanacetifolia.

The Leaves are twice winged, deeply cut, and downy underneath.

Fig. 6. *a b.*

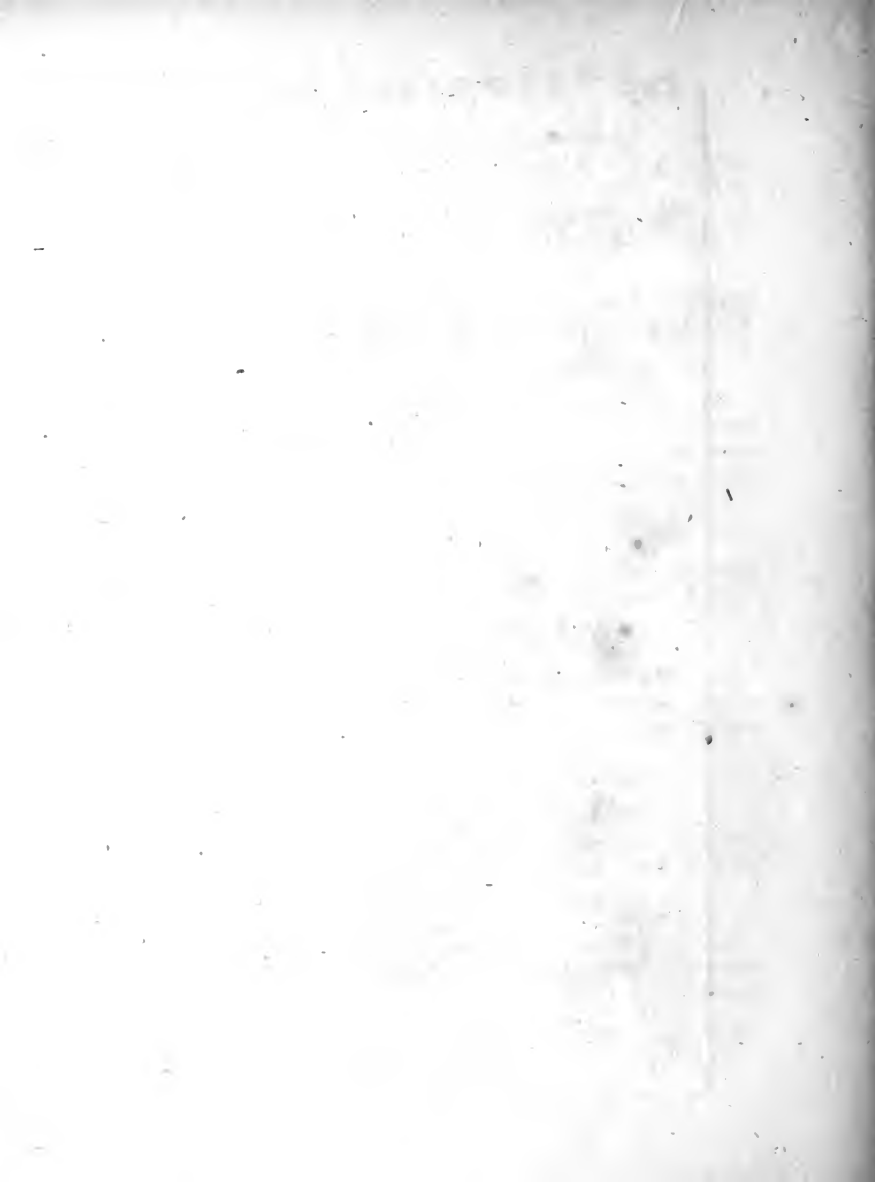
THIS

MUGWORT.

Pl. 100.

Generic Character.





THIS is a Perennial, native of Siberia: the Stalk is two feet high: the Leaves are greyish: the Flowers are oval, and of a pale green.

7. THREE FORK'D MUGWORT.

Plate 100. Fig. 7.

Character of the Species.

Artemisia Chinenfis.

The Leaves are simple, woolly, and cut into three at the end.

Fig. 7. a.

THIS is a Perennial, native of the North of China: the Stalk is two feet high: the Leaves are whitish and downy: those on the lower part are cut into three Segments at the point: the others are simple: the Flowers are brown.

8. GLOBULAR MUGWORT.

Plate 101. Fig. 8.

Character of the Species.

Artemisia Æthiopica.

The Leaves are linear, simply divided, and stand clustery: the Flowers are globular:

Fig. 8. a b.

THIS is a Perennial, native of Æthiopia, a shrubby Plant, flowering all the year: the Stem is brown: the young Shoots are pale and woolly: the Leaves are greyish: the Flowers are brown.

9. BRANCHY-LEAV'D MUGWORT.

Plate 101. Fig. 9.

MALE SOUTHERNWOOD.

Character of the Species.

[*Artemisia abrotanum dicta.*

The Leaves are cut into thready Segments in a various manner, and the Stalk is woody.

Fig. 9. a b.

THIS is a woody Plant, native of Syria: the Stem is brown: the young Shoots are greyish: the Leaves are pale: the Flowers are brown.

34 THE VEGETABLE SYSTEM.

10. FLESHY-LEAV'D MUGWORT.

Plate 101. Fig. 10.

Character of the Species.

Artemisia crithmifolia.

The Leaves are composed of slender but fleshy parts ; narrow, split, and divided.

Fig. 10. *ab.*

THIS is a Perennial, a native of the sea coasts of Portugal ; a hard and woody Plant : the Stem is brown, and eight or ten inches high : the Leaves are of a deep and glossy green, and their substance is fleshy. The Flowers are brown.

11. SLENDER SPIKED MUGWORT.

Plate 101. Fig. 11.

THE WORMSEED PLANT.

Character of the Species.

Artemisia fontanica.

The Leaves are multifid, and their Segments linear : the Spikes are simple, and the Flowers stand only on one side.

Fig. 11. *ab.*

THIS is a native of Persia, a low but shrubby Plant : the Stem is brown : the young Shoots are grey and downy : the Leaves are greyish : the Flowers are brown.

12. PINNATED MUGWORT.

Plate 101. Fig. 12.

Character of the Species.

Artemisia palustris.

The Leaves are simply and regularly winged : the Flowers stand clustered.

Fig. 12. *ab.*

THIS is a Perennial, native of Siberia, and frequent there in damp places : the Stem is weak and green : the Leaves are whitish : the Flowers are yellow.

13. TWIG-

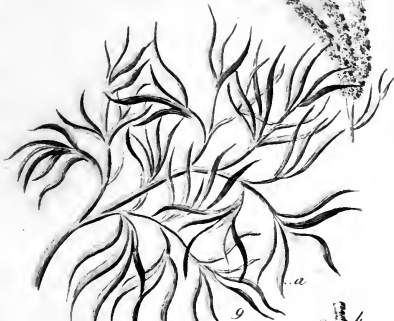
MUGWORT.

2.

Pl. 101.



*Globular
Mugwort.*



*Sea and
Branchy Mugwort?*



Fluffy Sea and Mugwort?



Slender Spiked Mugwort



*Pinnated
Mugwort?*



Twigg Mugwort?



Three winged Mugwort.



13. TWIGGY MUGWORT.

Plate 101. Fig. 13.

FINE LEAV'D MUGWORT.

Character of the Species.

Artemisiacampestris.

The Shoots are fine slender twigs : the Leaves are cut into a multitude of linear Segments.

Fig. 13. *a b*.

THIS is a Perennial, native of our dry open grounds : the Stem is woody at the base, and leans upon the ground. The Leaves are of a brownish green ; the Flowers are pale.

14. THRICE WING'D MUGWORT.

Plate 101. Fig. 14

Character of the Species.

Artemisia annua.

The Leaves are thrice winged and smooth : the Flowers are roundish, and hang drooping.

Fig. 14. *a b*.

THIS is a Perennial, native of the mountains of Siberia. The Stalk is green, and two feet high. The Leaves are of a pale green : the Flowers are brown.

15. SEA MUGWORT.

Plate 102. Fig. 15.

COMMON SEA WORMWOOD.

Character of the Species.

Artemisia maritima.

The Leaves are cottony, and cut into many parts : the Spikes of the Flowers droop.

Fig. 15. *a b*.

THIS is the Plant commonly sold in the place, and under the name of Roman Wormwood, though much inferior in virtue. It is a Perennial, native of our sea coasts : a white looking Herb, of a foot high, and of irregular growth. The Stalk is dusky : the Leaves and Shoots are all white and soft : the Flowers are brown.

16. V A-

36 THE VEGETABLE SYSTEM.

16 VARIOUS LEAVED MUGWORT.

Plate 102. Fig. 16.

Character of the Species.

Artemisia integrifolia.

The lower Leaves are pinnatifid: the upper ones are entire, lanced, and woolly underneath.

Fig. 16. *a b.*

THIS is a Perennial, native of Siberia, a Plant of four feet high. The Stalk is brown: the Leaves are of a dark green on the upper side, and white underneath: the Flowers are pale and roundish.

17. GLAU COUS MUGWORT.

Plate 102. Fig. 17. LAVENDER LEAVED MUGWORT.

Character of the Species.

Artemisia cærulescens.

The lower Leaves are simple and lanced, the upper ones are cut into a few divisions.

Fig. 17. *a b.*

THIS is a Perennial, native of the sea coasts of the Southern parts of Europe. The Stalks are brown: the Leaves are of a bluish green, and hairy on both sides. The Flowers are pale.

18. H A R P E D MUGWORT.

Plate 102. Fig. 18.

Character of the Species.

Artemisia Maderaspatana.

The Leaves are sinuated in the harped manner, the Flowers grow singly, opposite to the Leaves.

Fig. 18. *a b.*

THIS is a perennial, woody, but mean Plant, native of the Indies; and for the most part lies on the ground: the Stem is brown: the Shoots are greyish and hoary: the Leaves are downy, and soft to the touch. The Flowers grow in small rounded Cups, brown and glossy.

19. D W A R F-

MUGWORT.

3

Pl. 102.



Sea Mugwort.



Various leaved Mugwort.



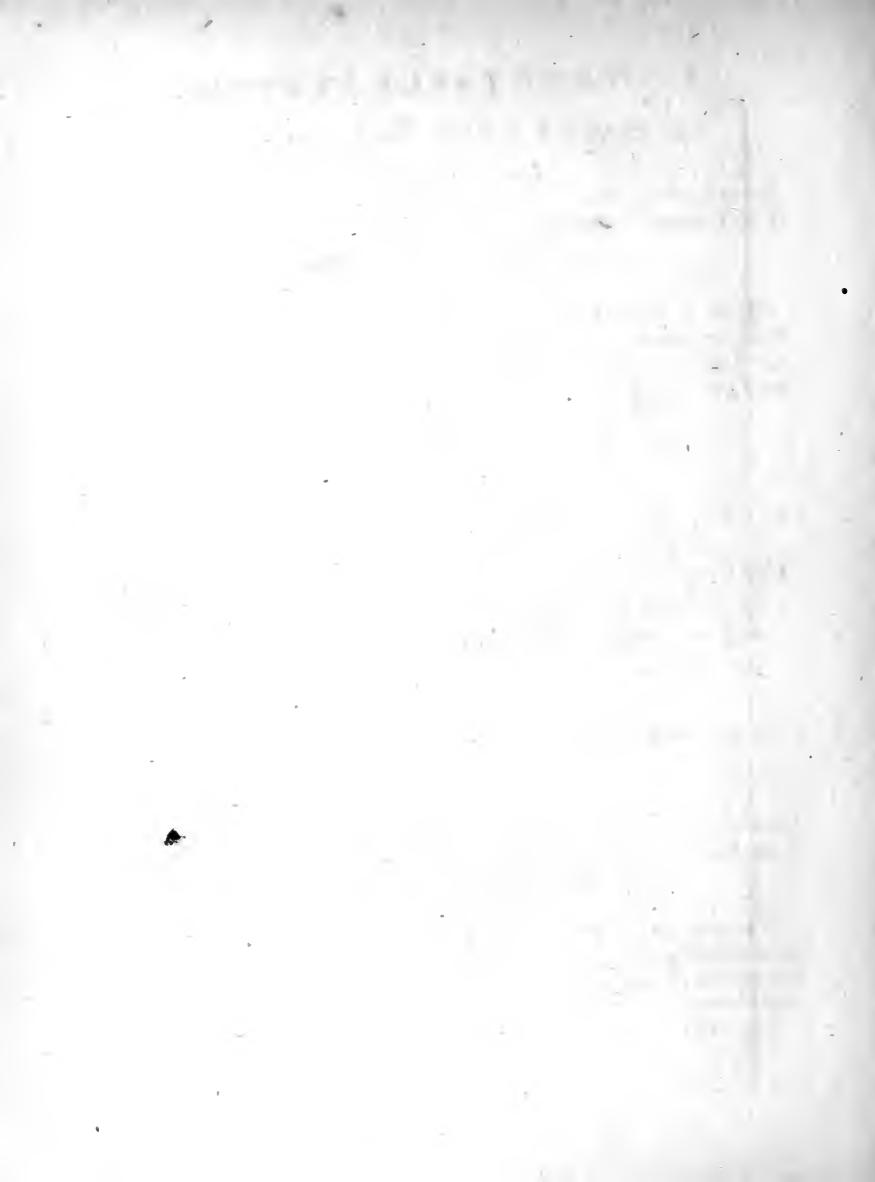
Glaucous Mugwort.



Harp'd Mugwort.



Dwarfish Mugwort.



19. DWARFISH MUGWORT.

Plate 102. Fig. 19.

Character of the Species.

Artemisia minima.

The Leaves are wedg'd and nurl'd: the Flowers stand in the bosoms of the Leaves.

Fig. 9 a. b.

THIS is a Chinese Dwarf; a very singular annual Plant. The Stalks are weak, brown, and not more than five or six inches long: the Leaves are perfectly smooth, and of a deep green: the Flowers are a pale brown.

G E N U S VIII.

C U D W E E D.

G N A P H A L I U M.

The Cup is rounded; and formed of oval Scales, which bend in at their tops: those at the Base are rounded, and membranaceous, and those toward the upper part, are looser, and filmy.

Plate 103. Fig. a a b c.

1. STRONG-SCENTED CUDWEED.

Plate 103. Fig. 1.

Character of the Species.

Gnaphalium fœtidum.

The Leaves embrace the Stalk, and are sharp-pointed, undivided, and woolly underneath.

Fig. 1. a b.

THIS is an Annual, native of Æthiopia. The Stalk is thick, greyish, and downy: the Leaves are downy on the under side, the Flowers are silvery white. The whole Plant has a strong and offensive smell.

38 THE VEGETABLE SYSTEM.

2. PLANTAIN CUDWEED.

Plate 103. Fig. 2.

Character of the Species.

Gnaphalium plantaginicum.

The radical Leaves are oval : the young Shoots creep ; the Stalk is simple.

Fig. 3. *a b.*

THIS is a Perennial native of Virginia ; the radical Leaves are soft to the touch, and of a faint green : the Stalk is three inches high, and at the top grows a loose tuft of delicate crimson Flowers.

3. SOFT HEADED CUDWEED.

Plate 103. Fig. 3. CATSFOOT : or MOUNTAIN CUDWEED.

Character of the Species.

Gnaphalium diacium.

The Stalk is simple : the Flowers stand in a thick downy cluster ; the young Shoots lean.

Fig. 3. *a b.*

THIS is a Perennial, native of our barren hills : the Stalk is not above three inches high : the Leaves are white underneath ; the Flowers form a very elegant downy head, of a clustered form, and pale crimson colour.

4. EVERLASTING CUDWEED.

Plate 103. Fig. 4.

AMERICAN CUDWEED.

Character of the Species.

Gnaphalium margaritaceum.

The Flowers grow in a broad spreading cluster : the Leaves are lanced, and sessile.

Fig. 4. *a b c.*

THIS is a Perennial, native of North-America : the Stalk is thick, strong, upright, greyish, and two feet high : the Leaves are green on the upper side, and hoary underneath : the Flowers are very beautiful : the Florets themselves are minute and yellow ; the Cups are silvery, white, and glossy.

5. GREAT

Page

CUDWEED.

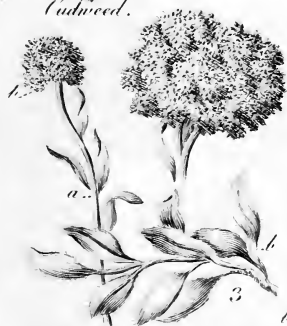


Generic Character:



Strong Scented Cudweed.

Plantain Cudweed:



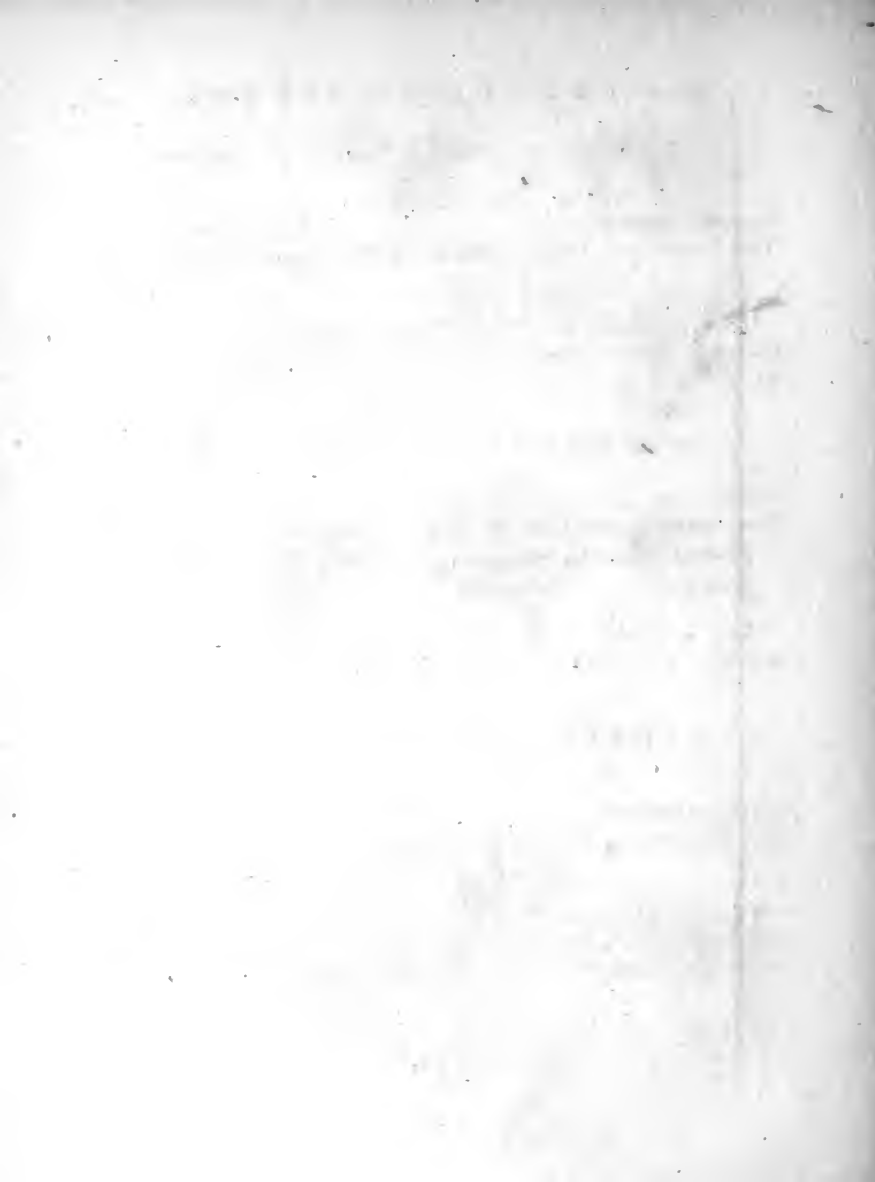
Soft-headed Cudweed.

Everlasting Cudweed.



Great flower'd Cudweed?

Branchy Cudweed:



5. GREAT FLOWER'D CUDWEED.

Plate 103. Fig. 5.

Character of the Species.

Gnaphalium grandiflorum.

The Leaves are oval, nervous, downy, and embrace the Stalk.

Fig. 5. *a b.*

THIS is a native of Æthiopia: the whole Plant is white: the Leaves are downy, both on the under and upper side. The Flowers are very large, and their Cup is of a silvery and shining white.

6. BRANCHY CUDWEED.

Plate 103. Fig. 6.

Character of the Species.

Gnaphalium helianthemifolium.

The Leaves are lanced, and embrace the Stalk: the Flowers stand in a compound cluster: the Stalk branches greatly.

Fig. 6. *a b c.*

THIS is a perennial woody Plant, native of Æthiopia: the Stem is brown: the Leaves are whitish: the Flowers are small and white.

7. THREADY-LEAFED CUDWEED.

Plate 104. Fig. 7.

Character of the Species.

Gnaphalium niveum

The Leaves are slender as threads, and lie in tidy clusters one over another.

Fig. 7. *a b*

THIS is a small woody plant, native of Æthiopia: the Stem is greyish, and the young Shoots are also grey: the Leaves are of a woolly aspect: the Flowers are of a silvery white.

8. PRICK-

8. PRICKLY CUDWEED.

Plate 104. Fig. 8.

Character of the Species.

Gnaphalium muricatum.

The Leaves are lanced, they turn back, and are armed with thorns at the end.

Fig. 8. *a b.*

THIS is a native of Æthiopia; a small woody Plant: the Stem is brown: the young Shoots are of a pale green: the Leaves are pale, and the points are so hard that they are prickly, and they all appear bent, oblique, and contorted: the Flowers are whitish.

9. CONIC CUDWEED.

Plate 104. Fig. 9.

Character of the Species.

Gnaphalium obtusifolium.

The Leaves are lanced, and downy underneath; the Stalk is branched; and the Flowers are conic.

Fig. 9. *a b c.*

THIS is an Annual, native of Virginia; an upright plant of two feet high: the Stalk is greyish, hairy, and firm; the Leaves are of a delicate green on the upper side, and white and woolly underneath: the Flowers are very beautiful, white, with a silvery gloss.

10. PALE HEADED CUDWEED.

Plate 104. Fig. 10.

Character of the Species.

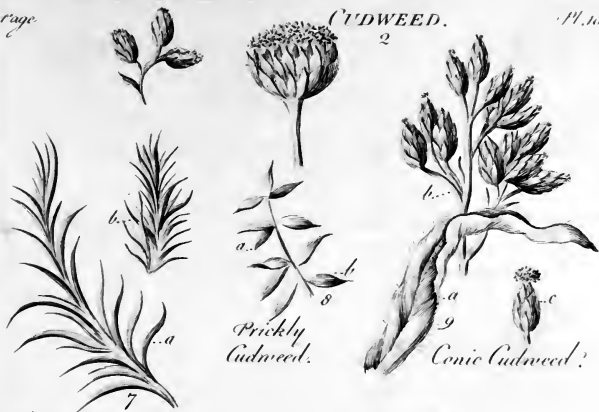
Gnaphalium indicum.

The Leaves are short, lanced, and obtuse; the Stalk is very branchy; the clusters are irregular.

Fig. 10. *a b.*

THIS is an Annual, native of China and the East Indies: the Stem is weak and whitish: the Leaves are of a delicate silvery green: and the Flowers are of a silver white.

11. SWORD-



Thready-leaved Cudweed.

Prickly Cudweed.

Conic Cudweed?



Pale-headed Cudweed.

Sword-leaved Cudweed?

Matted Cudweed?

100. The first of these is the
fact that the number of
cases of the disease is
increasing. This is due to
the fact that the disease is
more common in the
tropics than in the
temperate zones. It is also
more common in the
poor than in the rich.

The second fact is that the
disease is more common in
the tropics than in the
temperate zones. This is
due to the fact that the
climate is more favorable
to the growth of the
parasite.

The third fact is that the
disease is more common in
the poor than in the rich.
This is due to the fact that
the poor are more likely to
live in unsanitary conditions
and to have less access to
medical care.

The fourth fact is that the
disease is more common in
the tropics than in the
temperate zones. This is
due to the fact that the
climate is more favorable
to the growth of the
parasite.

The fifth fact is that the
disease is more common in
the poor than in the rich.
This is due to the fact that
the poor are more likely to
live in unsanitary conditions
and to have less access to
medical care.

THE VEGETABLE SYSTEM. 41

11. SWORD-LEAVED CUDWEED.

Plate 104. Fig. 11.

Character of the Species.

Gnaphalium luteo album.

The Leaves are sword shaped, and half embrace the Stalk ; the Flowers are clustered in great heads.

Fig. 11. a b.

THIS is an Annual, native of Portugal, a singular Plant: the stalk is upright, slender, and greyish: the Leaves are oblong, sword shaped, and of a delicate whitish green: the Flowers are very bright and glossy; silvery, but with some little tinge of gold.

12. ALATED CUDWEED.

Plate 105. Fig. 12.

Character of the Species.

Gnaphalium undulatum.

The Leaves are lanced, wavy, and run down the Stalk.

Fig. 12. a b.

THIS is an Annual, native of America: the Stalk is upright, firm, and two feet high: the Leaves are green on the upper side, but hoary underneath: the Flowers are yellowish: but the Cups are white and silvery.

13. LEAFY CUDWEED.

Plate 105. Fig. 13.

BROAD CITRINE STÆCHAS.

Character of the Species.

Gnaphalium arenarium.

The Leaves are large, thin, and numerous; the Stalk is simple; and the Flowers have branchy footstalks.

Fig. 13. a b.

THIS is an Annual; native of the dry and sandy open grounds of several parts of Europe: the Stalks are slender, upright, and pale: the Leaves are of a snowy whitish hue: the Flowers are of a delicate yellow

14. LINEAR CUDWEED.

Plate 105. Fig. 13.

STÆCHADOVE.

Character of the Species.

Gnaphalium stæchas dictum.

The leaves are linear and the Flowers stand in a branched Cluster.

Fig. 14. a b.

42 THE VEGETABLE SYSTEM.

THIS is a perennial, woody plant, native of Spain, the South of France, and of some parts of Germany. The Stem is brown : the Shoots are of a greyish colour : the Leaves are of a pale or silvery green : the Flowers are pale yellow.

FEW FLOWER'D CUDWEED.

Plate 105. Fig. 15

Character of the Species.

Gnaphalium fordidum.

The Leaves are linear, the Flowers are few, and grow naturally in threes.

Fig. 15. *a b.*

THIS is a Perennial, woody plant, native of the South of France : the Stalk is tender and greenish upwards : the Leaves are of a dull dead green : the Flowers are of dusky yellow : and their Cups are dull and greenish.

16. WEDGY CUDWEED.

Plate 105. Fig. 16.

Character of the Species.

Gnaphalium dentatum.

The Leaves are wedge shaped, and cut into three parts at the end.

Fig. 16. *a b.*

THIS is a delicate and beautiful Plant, native of Æthiopia : the Stem is thick : the Branches are tender and woody, and the young Shoots are whitish : the Leaves are pale : the Flowers are of a very beautiful yellow ; the Cups are also yellow and glossy.

17. EGG-LEAVED CUDWEED.

Plate 105. Fig. 17.

Character of the Species.

Gnaphalium petalatum.

The Leaves are egg-shaped, and have footstalks ; the Stem is branched and woody.

Fig. 17. *a. b.*

THIS

CUDWEED.

3

15-105



Leafy Cudweed.



Linear Cudweed.

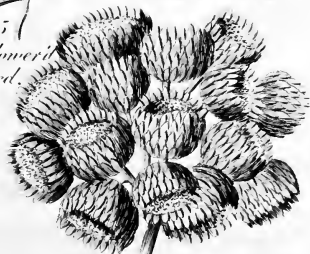


Ten-flowered Cudweed.



16

Wedgy Cudweed.



18

Golden Cudweed.



Egg-leaved Cudweed.

STATE OF NEW YORK

IN SENATE
January 10, 1907.

REPORT
OF THE

COMMISSIONER OF THE
LAND OFFICE

FOR THE YEAR
1906.

ALBANY:
J. B. LIPPINCOTT & CO.,
PRINTERS.

1907.

NEW YORK:

1907.

THIS is a white woody plant of Æthiopia: the Stem is thick and brown: the young Shoots are of a silvery grey: the Leaves are also of a silvery colour: the Flowers are of a delicate yellow.

18. GOLDEN CUDWEED.

Plate 105. Fig. 18.

Character of the Species.

Gnaphalium orientale.

The Leaves are numerous, the flowers form a great glo-
bular head.

Fig. 18. *a b.*

THIS is a Perennial, woody plant, native of Africa: the Stem is brown, the young Shoots are silvery and white: the largest Leaves grow toward the base of the shoots, and are a little folded, and of a silvery colour: the Flowers are of a very glorious yellow, Cups and all.

19. CRIMSON CUDWEED.

Plate 106. Fig. 19.

Character of the Species.

Gnaphalium rutilans.

The Leaves are lanced, the Stalk branches from the
bottom: the Flowers grow in recom pound clusters.

Fig. 19. *a b.*

THIS is a Perennial, native of Africa; a foot and a half high: the Stem is firm, whitish, and downy: the Leaves are of a pale green: the Flowers are crimson at first, but become yellow as they open fully.

20. FIERY CUDWEED.

Plate 106. Fig. 20.

Character of the Species.

Gnaphalium ignescens.

The Leaves are linear and woolly: the Flowers are red,
and stand in alternate clusters along the Stalk.

Fig. 20. *a b.*

THIS is a Perennial, native of Africa. The Stalk is tough and firm: the Leaves are of a downy aspect, and white: the Cups are silvery and shining; but the Florets themselves are of a fiery red.

21. REFLEX CUDWEED.

Plate 106. Fig. 21.

Character of the Species.

Gnaphalium imbricatum.

The Scales of the Cup turn back : the Leaves are lanced and downy.

Fig. 21. *ab.*

THIS is a Biennial, a native of Africa : the Stem is woody and brown ; the young Shoots are white : the Leaves are woolly and of a pure silvery white : the Flowers are crimson : the Cup is brown.

22. SWEET-SCENTED CUDWEED.

Plate 106. Fig. 22.

Character of the Species.

Gnaphalium odoratissimum.

The Leaves run down the Stalk, and are blunt, but have a point from the end.

Fig. 22. *ab.*

THIS is a Perennial, native of the East : the Stem is whitish and woolly : the Leaves are white on both sides, and soft : the Flowers are purple.

23. ROSE CUDWEED.

Plate 106. Fig. 23.

Character of the Species.

Filago pygmæa.

The Flowers terminate the Stem, and are surrounded by large perfect Leaves.

Fig. 23. *ab.*

THIS is an Annual, native of the southern parts of Europe, and flowers in July. It is not above three inches high : the Stalks are whitish : the Leaves are of a whitish green, and the Flowers pale crimson.

24. OVAL

24. OVAL CUDWEED.

Plate 106. Fig. 24.

Character of the Species.

Gnaphalium purpureum.

The Flowers are collected in an oval head, and the Leaves are lanced and naked.

Fig. 24. *a b.*

THIS is a Perennial, native of Virginia: the Stalk is upright, and a foot and a half high: the Leaves are of a dusky whitish colour: the Flowers are red; the cups are brown.

25. BROAD-HEADED CUDWEED.

Plate 106. Fig. 25.

Character of the Species.

Gnaphalium cymosum.

The Flowers are collected into a broad but compact head: the Leaves are lanced, and embrace the Stalk.

Fig. 25. *a b.*

THIS is a Perennial, native of Africa: the Stalk is silvery and soft: the Leaves are of a good green on the upper side, and white and woolly underneath: the Flowers are yellowish; the Cups are white.

26. SPATULA'D CUDWEED.

Plate 106. Fig. 26.

Character of the Species.

Gnaphalium patulum.

The Leaves are of the spatula shape; the Branches spread.

Fig. 26. *a b.*

THIS is a Perennial, native of Æthiopia: the Stem is firm, and on the upper part silvery, white: the Leaves are pale. The Flowers are yellow.

28. GRASSY CUDWEED.

Plate 107. Fig. 28.

FRENCH CUDWEED.

Character of the Species.

Gnaphalium Gallicum.

The Flowers stand close in the bosoms of the Leaves, and clefts of the Stalks: the Leaves are long and narrow.

Fig. 28. *a b.*

46 THE VEGETABLE SYSTEM.

THIS is an Annual, native of our dry grounds : the Stalk is eight inches high, grey, tough, and slender : the Leaves are of a grey green : the Flowers are brown.

29. WOOD CUDWEED.

Plate 107. Fig. 29. ENGLISH CUDWEED.

Character of the Species.

Gnaphalium sylvaticum.

The Stalk is simple and leafy, and the Flowers grow in the bosoms of the Leaves.

Fig. 29. *a b.*

THIS is a Biennial, native of our woods, and flowers in July : the Stalk is a foot high, upright, and without branches : the Leaves are whitish : the Flowers are brown.

30. LION'S PAW CUDWEED.

Plate 107. Fig. 30.

LION'S PAW.

Character of the Species.

Gnaphalium leontopodium.

The Stalk is simple ; one great head terminates it, and this is surrounded by a verge of leafy Films.

Fig. 30. *a b.*

THIS is a Perennial, native of the Swiss mountains, and flowers in August : the Stalk is four inches high : the Leaves are whitish : the Flowers are brown.

31. SEA CUDWEED.

Plate 107. Fig. 31.

Character of the Species.

Filago maritima.

The Leaves are woolly, obtuse, and dented : the cluster of Flowers is simple.

Fig. 31. *a b.*

THIS is a Perennial, native of our sea-coasts, and flowers in June : the Stalk is white, and seven inches high : the Leaves are white and woolly ; and the Flowers are brown.

32. FORK-

(UDWEED.

4



Crimson Cudweed?



Pirey-Cudweed.



Reflax Cudweed?



Sweet Scented Cudweed.



Rose Cudweed.



Oval Cudweed.



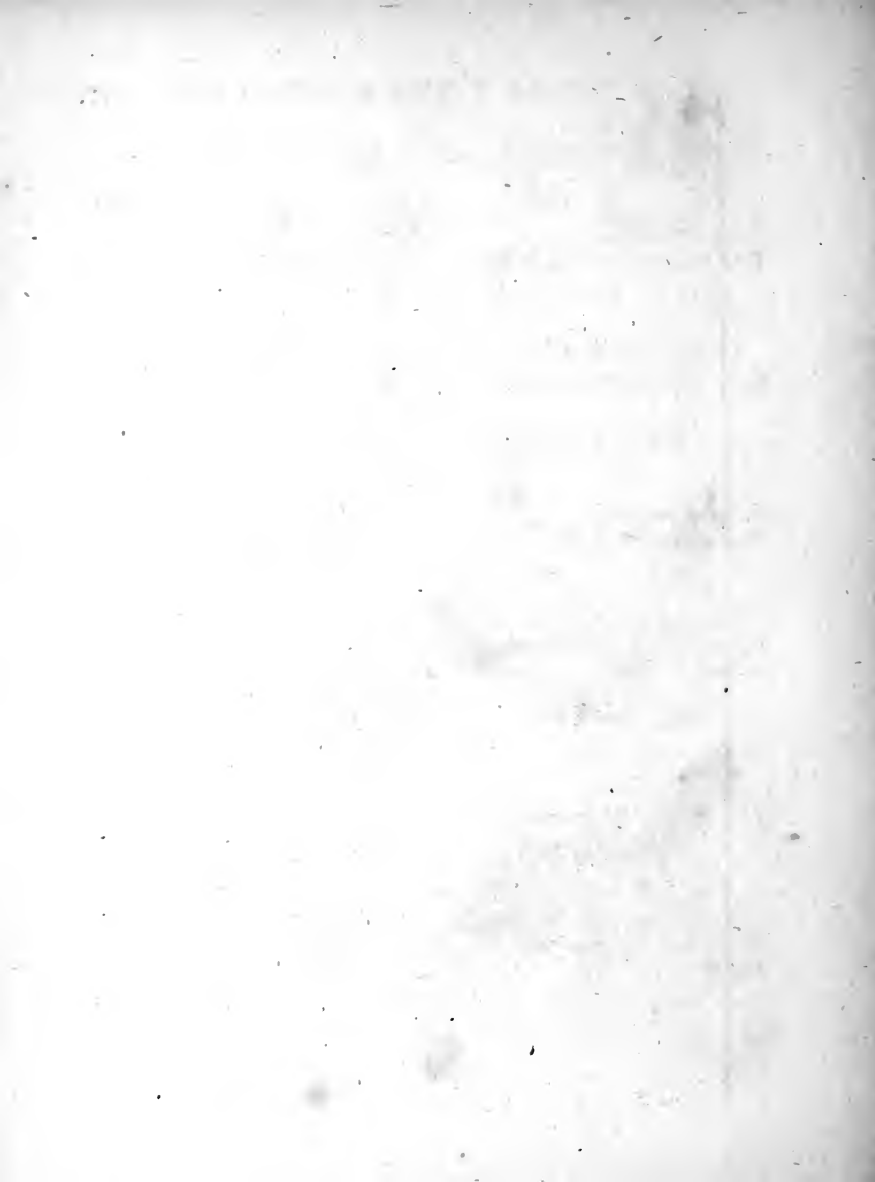
Broom-headed Cudweed.



Spatulated Cudweed.



Open Cudweed.



32. FORKED CUDWEED.

Plate 107. Fig. 32.

HERB IMPIOUS.

Character of the Species.

Gnaphalium Germanicum.

The Stalk splits in a forked manner: the Flowers stand in its divisions in round clusters.

Fig. 32. *a b.*

THIS is an Annual, common in our dry grounds, eight inches high: the Leaves are pale, and the Flowers are brown.

33. LONG FOOTSTALKED CUDWEED.

Plate 107. Fig. 33.

Character of the Species.

Gnaphalium faxatile.

The Flowers stand on long naked Footstalks: the Leaves are lanced and pointed.

Fig. 33. *a b.*

THIS is an Annual, native of Italy, and flowers in July: the Stalk is grey: the Leaves are whitish: the Flowers are of a pale brown.

34. BLACK-HEADED CUDWEED.

Plate 107. Fig. 4.

BLACK CUDWEED.

Character of the Species.

Gnaphalium uliginosum.

The Stalk is branched: the Leaves are oblong: the Flowers stand in small tufts at the tops.

Fig. 34. *a b.*

THIS is an Annual, common in wet places: the Stalk is weak: the Leaves are whitish; the Flowers are black: it flowers in August.

35. E L E-

35. ELEGANT CUDWEED.

Plate 107. Fig. 35.

SMALL LIONS PAW.

Character of the Species.

Gnaphalium Alpinum.

The Stalk is simple and leafy : the Flowers crown it in a cluster of pyramidal heads.

Fig. 35. a b.

THIS is a perennial Plant, native of the Swiss mountains, and flowers in June : the Leaves are green on the upper side, and white and downy underneath : the down is seen beyond the edge ; the Stalk is three inches high : the Flowers are pale.

36. SPREADING CUDWEED.

Plate 107. Fig. 36.

CORN CUDWEED

Character of the Species.

Gnaphalium arvense.

The Stalk divides into numerous spreading Branches : the Flowers stick close in the bosoms of the Leaves.

Fig. 36. a b.

THIS is an Annual, native of our barren grounds, and flowers in August : the Stalk is four inches high : the Leaves are small and oval : the Flowers are brown : the Stalk and Leaves are woolly.

37. LEANING CUDWEED.

Plate 107. Fig. 37.

MOUNTAIN CUDWEED.

Character of the Species.

Gnaphalium montanum.

The Stalk leans towards its Base : the Flowers are conic, and grow at the tops, and in the bosoms of the Leaves.

Fig. 37. a b.

THIS is an Annual, common on our dry hilly grounds : The Stalk is weak, branched, and five inches high. The Leaves are narrow, small, and sharp-pointed : and the Flowers are brown.

CUDWEED.

5

Pl. 107



b... 28

Grassy Cudweed. a. b.



Wood Cudweed. b...



Large-headed Cudweed. a...



Forked Cudweed. a. b...



Long-footstalked Cudweed. b... a



Black-headed Cudweed. b...



Elegant Cudweed. a. b...



35



Spreading Cudweed. a. b...



Leaning Cudweed. b... a



Pyramidal Cudweed. a. b...



Flowering Cudweed. b... a

39



38. PYRAMIDAL CUDWEED.

Plate 107. Fig. 38.

Character of the Species.

Filago pyramidata.

The Flowers form a pyramidal compact head, and branches rise above them.

Fig. 38. *a b.*

THIS is a very small Plant, native of Spain, not more than two inches high : the Stalk is brownish : the Leaves are white ; and the Flowers pale brown. It flowers in August.

39. HEATHY CUDWEED.

Plate 107. Fig. 39.

Character of the Species.

Gnaphalium teretifolium.

The Leaves are cylindric, and stand clustered.

Fig. 39. *a b.*

THIS is a woody Plant, native of Æthiopia : the Leaves are downy and white : and the Flowers are of a glossy grey.

ORDER V.

With the general Cup fringed, or having additional scales at the Base.

GENUS I.

SENECIO.

The cup is conic, composed of a single row of scales, and has a pyramidal number of small short scales fringing the Base.

Plate 108, *o a b.*

30 THE VEGETABLE SYSTEM.

1. LANCED GROUNDSEL.

Character of the Species.

Senecio divaricatus.

The Leaves are simple, lanced, dented, and rough :
the Flowers stand on divided footstalks.

Fig. 1. *a b.*

THIS is an Annual, native of China, and flowers in June : the
Stalk is grey, and eight inches high : the Leaves are pale and
woolly : the Flowers are small and yellow.

2. SINUATED GROUNDSEL.

Plate 108. Fig. 2.

COMMON GROUNDSEL.

Character of the Species.

Senecio vulgaris.

The Leaves are variously and irregularly sinuated, and
are all the way nearly of a breadth.

Fig. 2. *a b.*

THIS is an Annual, six or eight inches high ; with weak, tho'
thick Stalks, usually red : the Leaves are of a strong green, cut, or
eroded. The Flowers are yellow : the body of the Cup is green,
and the Fringe is black.

3. LONG STALK'D GROUNDSEL.

Plate 108. Fig. 3.

BASTARD CHINA.

Character of the Species.

Senecio Pseudo-China dictus.

The Flower-stalks are very long, and nearly naked.

Fig. 3. *a b.*

THIS is a Perennial, native of the East-Indies. The Leaves
are of a fine green : the Stalk is two feet high ; slender, hairy, and
in a manner naked. The Flowers are yellow : the Cup is green,
and its Fringe is brown.

4. A M-

page

GROUNDSEL.

Pl. 108.



Generic Character.



Lanceol Groundsel?



Sinuated Groundsel?



Long Stalk'd Groundsel.



Amplexicaul Groundsel?



4. AMPLEXICAUL GROUNDSEL.

Plate 108. Fig. 4.

Character of the Species.

Senecio hieraciifolius.

The Leaves embrace the Stalk, and swell in the middle, and are very deeply cut in irregular segments.

Fig. 4. *a b.*

THIS is an Annual, native of South-America, flowering all Summer. The Leaves are cut, and of a fine green. The Flowers are numerous, small, and of a faint yellow.

HORSE FOOT.

CACALIA.

The Cup is formed of a single Series of oblong lanced Scales, which sometimes unite at their edges. The Fringe is made of a few short filmy scales.

Plate 109. *a a b.*

S E R I E S I.

HERBACEOUS.

1. PERFORATED HORSEFOOT.

Plate 109. Fig. 1.

Character of the Species.

Cacalia porephyllum dict.

The Leaves are elliptic, crenated, and spotted: they are also seen full of holes when held up to the light.

Fig. 1. *a. b.*

THIS is an Annual, native of America, and flowers in August. The Stem is woody and brown: the Leaves are of a fresh green; and as it seems spotted with a dusky brown: when held to the light they appear perforated. The Flowers are yellow.

H A R P-

2. HARPLEAVED HORSEFOOT.

Plate 109. Fig. 2.

Character of the Species.

Cacalia Sonchifolia.

The Leaves are sinuated, and have a great lobe at the end: the Segments are dented.

Fig. 2. *ab.*

THIS is an Annual, native of China: the Stalk is firm: the Leaves are of a deep green: the Flowers are small, and of a pale crimson. They Blow in July.

3. TRILOBATE HORSEFOOT.

Plate 109. Fig. 3.

Character of the Species.

Cacalia sonchifolia.

The Leaves are spread, three lobed, and indented.

Fig. 3. *ab.*

THIS is a Perennial, native of Siberia; a tall Plant. The Stalk is tinged with purple; the Leaves are of a fresh green on the upper side, but greyish underneath. The Flowers are crimson.

4. FRAGRANT HORSEFOOT.

Plate 109. Fig. 4.

Character of the Species.

Cacalia suaveolens.

The Leaves are arrowed, and their Footstalks dilate toward the top.

Fig. 4. *ab.*

THIS is a Perennial, native of North-America; a Plant of five feet high: the Stalk is of a whitish green: the Leaves are of a fresh green colour: the Flowers are small and white.

5. BLUISH LEAV'D HORSEFOOT.

Plate 109. Fig. 5.

Character of the Species.

Cacalia atriplicifolia.

The Leaves are somewhat heart-shaped, and sinuated.

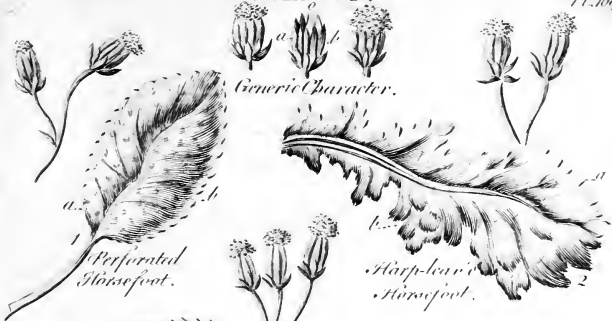
Fig. 5. *ab.*

THIS

HORSEFOOT.

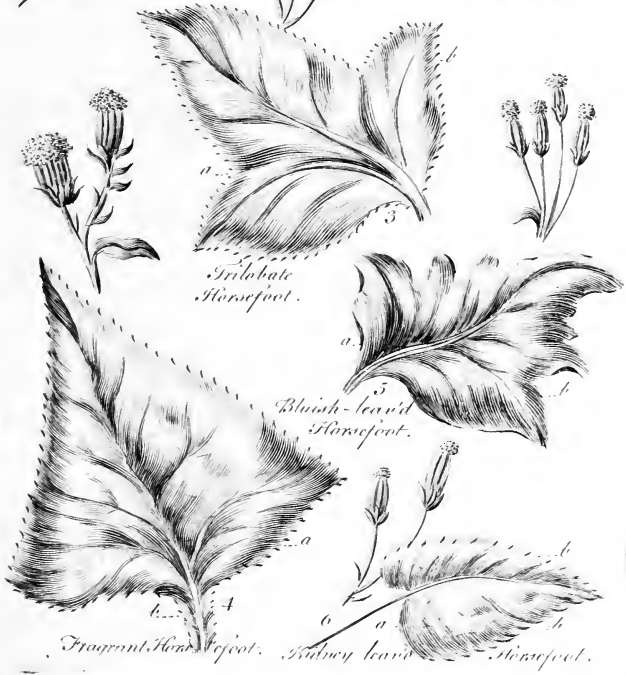
Pl. 109.

Generic Character.



Perforated Horsefoot.

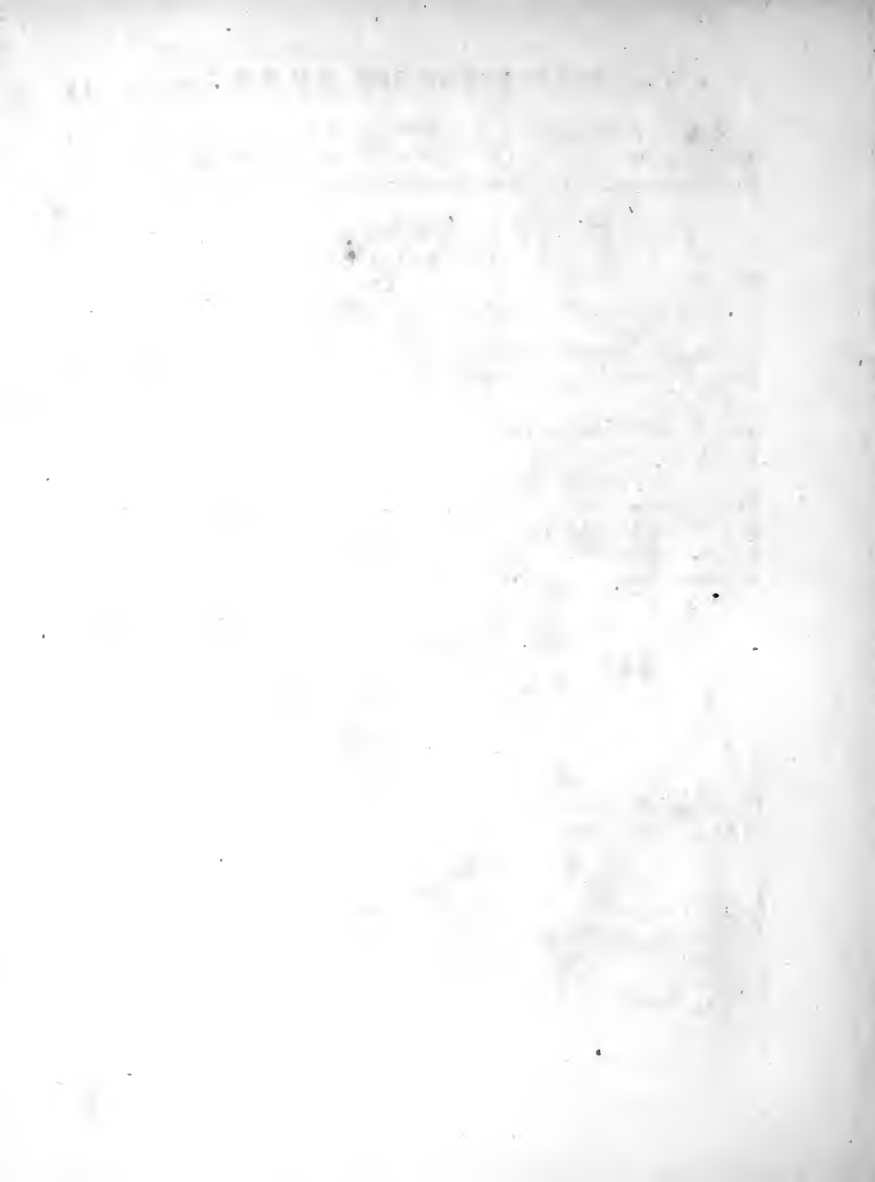
Harp-leaf'd Horsefoot.



Trilobate Horsefoot.

Bluish-leaf'd Horsefoot.

Fragrant Horsefoot. Nutmeg-leaf'd Horsefoot.



THIS is a Perennial, native of North-America : the Stalk is of a greyish green, and smooth : the Leaves are of a bluish green, and their surface is glossy. The Flowers are very small and whitish.

6. KIDNEY-LEAV'D HORSEFOOT.

Plate 109. Fig. 6.

Character of the Species.

Cacalia Alpina.

The Leaves are kidney shaped, and sharply ferrated.

Fig. 6. *a b.*

THIS is a Perennial, native of the mountains of Switzerland : the Stalk is robust, upright, and tinged with crimson : the Leaves are very delicate, thin, and of a fresh green, but acute and indented. The Flowers stand at the tops of the Branches, and are small, and of a pale crimson.

It is singular, that the Florets of the *Cacalia* are cut only into four Segments instead of five : but this holds good in the shrubby, as well as the herbaceous kinds ; and is universal in the Genus. We find it occasionally in some Species of the other Genera, but not with this determinate regularity.

S E R I E S II.

SHRUBBY HORSEFOOT.

7. OVAL HORSEFOOT.

Plate 110. Fig. 7.

Character of the Species.

Cacalia antieuphorbium dicta.

The Leaves are oval, and three lines run from them down the Stem.

Fig. 7. *a b.*

THIS is a tall succulent Plant, native of Æthiopia. The base of the Stem is hard and brown : the Shoots are very thick, green, juicy, and tender. We see it but imperfectly in this unnatural climate ; but in its original soil, it is close set along all these young Shoots,

54 THE VEGETABLE SYSTEM.

with oval, but somewhat oblong Leaves, which have three peculiar ribs, that run down from their Base: the Flowers are small and white: the Cup is divided deeper than in the other *Cacalias*, and has but a slight Fringe.

8. LANCED HORSE FOOT.

Plate 110. Fig. 8.

Character of the Species.

Cacalia kleiniana.

The Leaves are lanced, and the branches have faint marks of scars from their infertions.

Fig. 8. *a b*.

THIS is perennial, a native of the Canaries, a singular and very beautiful Plant; the Stem is thick and woody toward the Base, upwards it is tenderer, and of a bluish green, but spotted with brown scars, where Leaves have fallen off. At the crown of the Stem, and from several thick shoots from its side grow spreading clusters of Leaves of a bluish green, perfectly flat and smooth. The Flowers are small and whitish.

9. FLATTED-LEAV'D HORSE FOOT.

Plate 110. Fig. 9.

Character of the Species.

Cacalia ficoides.

The Leaves are lanced and flattened.

Fig. 9. *a b*.

THIS is a native of Æthiopia; the base or Stem is brown and woody: the young Shoots are very fleshy and green: the Leaves are large, fleshy, of a pale green, and flat. The Flowers are small and white.

10. WARTED HORSE FOOT.

Plate 110. Fig. 10.

Character of the Species.

Cacalia papillaries.

The Stem is covered with brown warts, which are the remains of fallen Leaves.

Fig. 10. *a b*.

THIS

HORSEFOOT.

2.

Pl. no.





THIS is a large and fleshy Shrub, native of Æthiopia, and distinguished by its rough and most singular aspect. The Stem is thick, juicy, and of a faint green, but covered with a kind of rising tubercles. These are the remains of the bases of Leaves which grow hard when the Leaf itself is fallen away: they stand to a considerable height beyond the general surface of the Stalk, and are abrupt at the ends: they have perfectly the appearance of harmless Spines. The Leaves are of a bluish green: the Flowers are small and white.

* * * THERE are five other Genera of this Class extremely singular, each consisting of only one or two Plants: we shall therefore give them in one view together. The last of them is that by which Nature connects the Plants of this and the succeeding Class.

G E N U S III.

C H A F E W E E D.

M I C R O P U S.

Character of the Genus.

The Cup has five Scales of a hooded form: the Fringe five filmy Leaves.

Plate III. *a a b.*

1. PROCUMBENT CHAFEWEED.

Plate III. Fig. 1.

Character of the Species.

Micropus supina.

The Leaves are covered with a silvery down, and the Seeds are prickly.

Fig. 1. *a b.*

THIS is an Annual, native of Portugal, and flowers in July. The Stalks are six inches long. The Leaves are silvery. The Flowers which are inconsiderable, are white. We know no other Species.

G E N U S

G E N U S IV.

COTTONWEED.

STÆHELINA.

Character of the Genus.

The cup is tiled, its scales are lanced, and their points droop. The fringe is filmy.

Plate III. Fig. *o o a b*.

1. GOLDEN COTTONWEED.

Plate III. Fig. 2.

Character of the Species.

Stæhelina gnaphalodes.

The Leaves are linear, and undivided.

Fig. 2. *a b*.

THIS is a Perennial, native of the Cape, and flowers in August : the Stem is woody : the Leaves are whitish, and the Flowers are yellow.

2. DENTATED STÆHELINA.

Plate III. Fig. 3.

Character of the Species.

Stæhelina dubia.

The Leaves are linear and dentated.

Fig. 3. *a. b*.

THIS is a Biennial, native of Spain : and flowers in July : the Stem is brown : the Leaves are whitish, and the Flowers are white.

G E N U S V.

CROWN WORT.

STÆBE.

Character of the Genus.

The Cup is round : its Scales are awly and hard : the Fringe is soft : each Floret has a separate five leaved Cup.

Plate III. *o o o a b c*.

1. HEATHY

I. HEATHY STÆBÆ.

Plate III. Fig. 4.

Character of the Species.

Stæbæ Æthiopica.

The Leaves stand clustered, and are narrow and hooked.

Fig. 4. a b.

THIS is a woody perennial Plant, native of Æthiopia, it flowers in August: the Stem is brown: the Leaves are greyish, and the Flowers pale yellow.

G E N U S VI.

S H E E P S R A M P I O N.

J A S I O N E.

Character of the Genus.

The Cup is formed of five Scales; its Fringe of five films, nearly equal to them: each Floret has also its separate Cup within, cut into five Segments.

Plate III. o o o o a b c.

I. HAIRY SHEEPS RAMPION.

Character of the Species.

Jasione montana.

The Leaves are linear, and slightly serrated.

Plate III. a b.

THIS is an Annual, native of our dry hilly pastures, and flowers in August. The Stalk is slender, and a foot high: the Leaves are greyish, and the Flowers are blue.

G E N U S VII.

B R O A D F O O T.

E L E P H A N T O P U S.

Character of the Species.

The Cup is imbricated, and its Scales are prickly: the Fringe consists of four pyramidal films. There is also an involucre of three great Leaves, containing several flowers with their cups. The florets run out from a tubular base into a narrow flat form with five indentings.

Plate III. *ooooooooabcd.*

1. R U G G E D B R O A D F O O T.

Plate III. Fig. 6.

Character of the Species.

Elephantopus Scaber.

The Leaves are oblong, lanced and rugged.

Fig. 6. *ab.*

This is a Perennial, native of the Indies, and flowers in August. The stalk is rough, pale, and a foot high. The Leaves are rugged and dusky. The Flowers are crimson.

2. W O O L L Y B R O A D F O O T.

Plate III. Fig. 7.

Character of the Species.

Elephantopus tomentosus.

The Leaves are oval and downy.

Fig. 7. *a.*

This is a Perennial, native of Virginia, and flowers in August. The Stalk is downy, and a foot and a half high. The Leaves are whitish, and the Flowers are crimson.

H E R B S.

COTTON-WEED.



Generic Character.



Golden Cotton-weed.

Dentated Cotton-BROADFOOT.

CROW-WEED.



Generic Character.



Hoathy Crow-weed.



Rugged Broadfoot.

CHAFEEWEE. SHEEPS-RAMPION. *Fl. m.*



Generic Character.



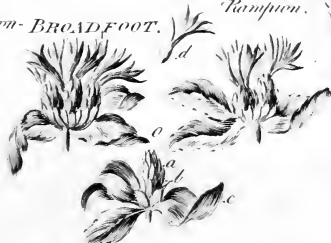
Procumbent Chafeweed.



Generic Character.



Hairy Sheeps-Rampion.



Generic Character.



Woolly Broadfoot.

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PHYSICS

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H E R B S.

With ASSEMBLED FLORETS, and UNITED
CHIVES.

C L A S S III.

With ASSEMBLED LIGULATED FLORETS.

Of the Orders or Subdivisions of the THIRD CLASS.

THESE Plants have some differences in their Cups ; which are constant to the Genera whereto they belong, and therefore become the marks of distinct Orders : but the number is less by one than in the tubulated, radiate, and naked Classes : for the Ligulated Class does not afford one Plant whose Cup is entire.

SUCH a Cup as the *Orthonna* shews among the radiated kinds, the *Tarchonanthus* offers among the naked ; a vase of one piece nip'd at the rim : but among these there is no such Cup.

THE four other distinctions are found in this Class ; but the Plants are distributed very differently under them. Both in the radiated and naked kinds, the order of fringed Cups contains only one Genus :
here

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here it is the most comprehensive of the whole. The same order which in those two Classes holds only the radiated or naked Species of Groundsel, in this of the ligulated kinds has no less than seven genera : and, as the first natural order of the other assembled Flowers is wanting altogether here, the two succeeding are but very thinly supplied : the second has only one genus, the *Andryala* : and the third only one, the *Tragopogon*. In this class, therefore, Nature has been more uniform than in those. The Tiled Cup is the only kind beside the Fringed, which is of any consequence.

THE Plants, with assembled ligulated Florets, are therefore to be comprised under four Orders.

O R D E R I.

THOSE which have the Cup simple, or of one row of Scales.

O R D E R II.

DOUBLE, or with two rows of Scales.

O R D E R III.

TILED, or with many rows of Scales like Tiles.

O R D E R IV.

FRINGED, or with a border of a different kind at the bottom.

HERBS

H E R B S.

S E R I E S I.

With U N I T E D C H I V E S.

C L A S S III.

With ASSEMBLED LIGULATED FLORETS.

O R D E R I.

With the G E N E R A L C U P simple.

G E N U S I.

W O O L T H I S T L E.

A N D R Y A L A.

Character of the Genus.

The Cup is rounded, short, and hairy ; its Scales are numerous, equal, and sharp pointed.

See Plate 112. *a a b*.

1. ENTIRE LEAV'D WOOL-THISTLE.

Plate 112. Fig. 1.

Character of the Species.

Andryala integrifolia.

The Leaves are undivided.

THIS is an Annual, native of the southern parts of Europe, and flowers in July and August : it is a foot and a half high, and singular enough to have kept a place long in gardens in any degree.

Vol. III.

R

Fig. 1. *a*.
grec

gree curious. The Stalk is white : the Leaves are also whitish and woolly : the Flowers are of a good, bright, and strong yellow : they grow on the tops of all the branches.

2. CUT-LEAV'D-WOOL-THISTLE.

Plate 112. Fig. 2.

Character of the Species.

Andryala sinuata.

The Leaves are deeply sinuated, and spear-shaped at the end.

Fig. 2. *a b.*

THIS is a Perennial, native of the Cape of Good-Hope, and flowers in July. It shews, tho' the Cape Plants are in a great degree peculiar, they are not all so ; for it is found also in Italy. It is a foot high, a white Plant with golden Flowers : the Leaves are covered with a white Wool ; and the Stalk is also white. It bears our open air freely, but the soil must be dry, or it fails in winter.

O R D E R II.

With the general Cup DOUBLE ; or composed of two rows of Scales.

G E N U S I.

GOATSBEARD.

T R A G O P A G O N.

Character of the Genus.

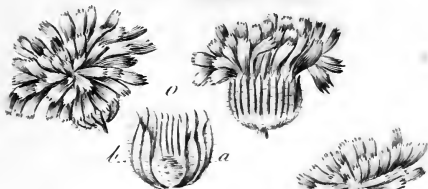
The Cup is composed of long leafy pointed Scales in two distinct rows.

Plate 113. *a a b.*

1. SIMPLE-

WOOLLY THISTLE.

fl. 112.



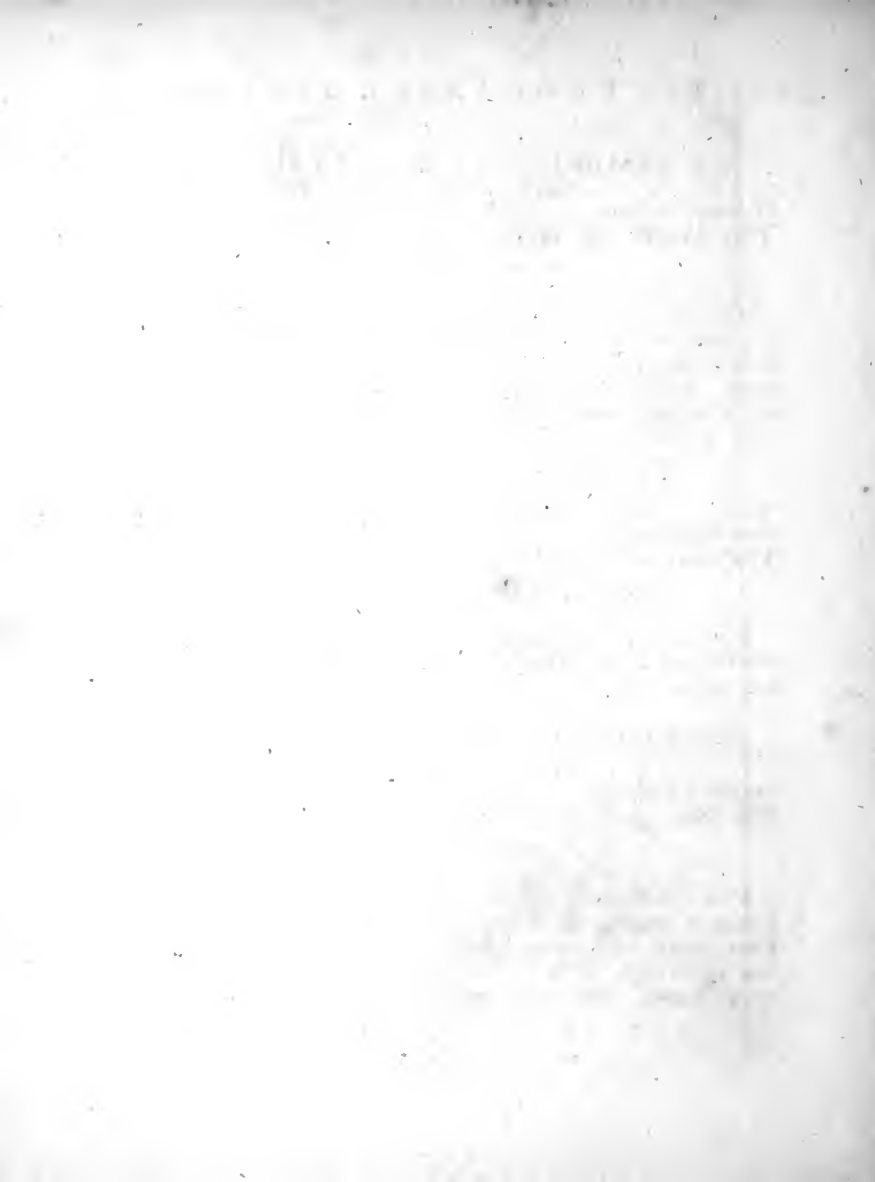
Generic Character.



Entire leav'd
Woolly Thistle.



Cut leav'd Woolly Thistle ?



1. SIMPLE-LEAV'D GOATSBEARD.

Plate 113. Fig. 1. YELLOW GOATSBEARD.

Character of the Species.

Tragopogon pratensis.

The Leaves are simple, grassy, and undivided : the Cup is longer than the Flower.

Fig. 1. *a a.*

THIS is a Biennial, native of our pastures, and flowers in July : it is two feet high : the Leaves and Stalk are of a fine grassy green, or somewhat paler : the Flowers are yellow : they always close at noon. LINNÆUS makes the Cup of this Plant equal with the Flower : it is considerably longer.

2. WAVY GOATSBEARD.

Plate 113. Fig. 2.

Character of the Species.

Tragopogon Orientale.

The Leaves are undivided, but are waved at the edge : the Cup is shorter than the Flower.

Fig. 2. *a b.*

THIS is a Biennial, native of the East, and flowers in June : it is two feet and a half high : the Leaves are delicately waved, and of a deep green. The Flowers are extremely large, and of a fine yellow.

3. THICK-CROWN'D GOATSBEARD.

Plate 113. Fig. 3.

SALSAFIE.

Character of the Species.

Tragopogon portifolium.

The Stalk grows thick just under the Flower, and the Cup is longer than the rays.

Fig. 3. *a b.*

THIS is a Biennial, native of the southern parts of Europe, and flowers in August : it has long had a place in gardens, as an esculent Plant, and is what was heretofore called Artific, now Salsafie : it is near a yard high. The Leaves are of a strong green, and the Flowers are purple. The young Stalks of this, and of the wild, or first kind,

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kind, are eaten as Asparagus: there is a great deal of this kind now wild in the North of England: but probably it is from Seeds scattered out of gardens.

4. HAIRY GOATS BEARD.

Plate 113. Fig. 4.

Character of the Species.

Tragopogon Hybridum.

The Leaves are grassy and hairy: the Cup is longer than the Flower.

Fig. 4. *a b.*

THIS is an Annual, native of Italy, and flowers in July: a low but very handsome Plant: the Stalk rises to about fourteen inches in height, and is of a faint green: the Leaves are of a delicate pale crimson.

5. HARPED GOATS BEARD.

Plate 114. Fig. 5.

Character of the Species.

Tragopogon Virginicum.

The radical Leaves are harped, or pinnatifid with a great end: those on the Stalk are undivided.

Fig. 5. *a b.*

THIS is a Biennial, native of North-America, and flowers in September: the radical Leaves are numerous, of a deep green, and smooth. The Stalk is a foot and a half high, and has about two Leaves: these are lanced, undivided, and embrace it, and are of a deader green. The Cups are shorter than the Flowers: and these are of a pale yellow. The Cup contradicts LINNÆUS's character: he allows it but eight Leaves, or Scales, and yet himself owns this has twelve.

6. WOOLLY GOATS BEARD.

Plate 114. Fig. 6.

Character of the Species.

Tragopogon dalechampii.

The Leaves are woolly, and deeply sinuated, and have a large end: the Cup is shorter than the Flower.

Fig. 6. *a b.*

THIS

GOATSBEARD.

Pl. 113.



Generic Character.



Simple-leaved Goatsbeard.



Hairy-leaved Goatsbeard.



Thick Crowned Goatsbeard.



Hairy Goatsbeard.





GOATSBEARD.

PL. 114.



Rapid Goatsbeard.



Woolly Goatsbeard.



Prickly Goatsbeard.



Marsh Goatsbeard.

THIS is a Perennial, native of Spain, and flowers in July: it is a singular and not inelegant Plant: the Stalk rises to a foot and a half: the Leaves are white and woolly; and the Flowers are of a very delicate yellow.

7. PRICKLY GOATSBEARD.

Plate 114. Fig. 7.

Character of the Species.

Tragopogon picroides.

The Cups are prickly, and shorter than the Flower: the Leaves are sinuated.

[Fig. 7. a b.

THIS is a native of the Greek islands, and flowers in August: a Plant of the Sow-thistle aspect; but with the Goatsbeard Cup: it is two feet and a half high. The Stalk is pale: the Leaves are of a fine green, and the Flowers are yellow: it bears the free air perfectly with us: and grows elsewhere so well from the scattered Seeds, that in the South of France it appears as native.

8. HARSH GOATSBEARD.

Plate 114. Fig. 8.

Character of the Species.

Tragopogon asperum.

The Cups are covered with short harsh bristles, and are shorter than the Flower.

Fig. 8. a.

THIS is a Biennial, native of the South of France, and flowers in August; it is two feet and a half high: the Stalk is pale: the Leaves are of a fine fresh green, and the Flowers are yellow. The Cups have a yellowish brown aspect, which is owing to the Hairs on them, and is singular: the Plant has more the habit of the Sow-thistles than Goatsbeard, but the Cup is incontestibly of the Goatsbeard kind.

THE wild Goatsbeard of Germany has by some been thought different from that of England: but though a larger Plant, it is the same. The Cups in the German kind are usually somewhat shorter than in the English, but not constantly so.

O R D E R III.

G E N U S I.

d With the general Cup TILED ; or composed of several ranges of Scales.

S O W - T H I S T L E.

S O N C H U S.

Character of the Genus.

The cup swells at its Base : the Scales are numerous, pyramidal, and unequal.

Plate 115. *a a b*.

It is not always, that in the course of an artificial method we can pursue the steps of Nature ; yet in this instance it is happily effected : the two last Goatsbeards have so much of the Sow-thistle habit, that they lead easily and naturally into this Genus.

1. YELLOW HAIR'D SOW-THISTLE.

Plate 115. Fig. 1. TREE SOWTHISTLE.

Character of the Species.

Sonchus arvensis.

The Cups and Footstalks of the Flowers are covered with long thick yellow hairs. The Leaves are hearted at the Base.

Fig. 1. *a b*.

THIS is a Perennial, native of our clayey corn-fields, and flowers from June to November. A stately, and far from an inelegant Plant. The Leaves are of a fine bright, tho' somewhat yellowish green. The Stalk is a yard high, and of the colour of the Leaves : the Flowers are large and yellow.

2. PRICK-

2. PRICKLY SOWTHISTLE.

Plate 115. Fig. 2. JAGGED, PRICKLY SOWTHISTLE.

Character of the Species.

Sonchus oleraceus asper.

The Cups and Footstalks of the Flowers are smooth :
the Leaves are edged with brown weak thorns.

Fig. 2. a b.

THIS is an Annual, native of our corn-fields and garden grounds, and flowers from July to November, in a repeated succession : the seeds scattered in July, raise Plants that flower in August ; and this continues till the frosts kill them. It is two feet high, and the Stalks and Leaves are of a good fresh green : the Flowers are yellow. LINNÆUS thinks this only a variety of the smooth Sowthistle ; and RAY, on the other hand, makes many Species out of this one, as the Leaves are more or less jagged : Extreams are generally wrong. This Plant will not be raised from seeds of the smooth kind : but all its variations in jagging, will rise from its own Seed. I have tried it at Bayeswater this summer.

IF the Stalk of the jagged kind be cut down, branches, with undivided, but prickly Leaves, will rise from the part left : but this is all. The smooth will not become prickly, nor this smooth by any management.

3. ROUGH FOOT STALK'D SOW-THISTLE.

Plate 115. Fig. 3.

Character of the Species.

Sonchus Canadensis:

The Footstalks of the Flowers are long and rough :
the Leaves are deeply sinuated.

Fig. 3. a b.

THIS is an Annual, native of Canada, and flowers in August, The Leaves are of a fresh green on the upper side, and grey below : the Flowers are blue.

4. SCALY-

4. SCALY-FOOTSTALK'D SOWTHISTLE.

Plate 115. Fig. 3.

Character of the Species.

Sonchus Floridanus.

The Leaves are harped : the footstalks of the Flowers are covered with little Scales.

THIS is an Annual, native of Virginia, and flowers in August : it is five feet high : the Leaves are pale green ; and the Flowers are blue.

Fig. 4. a b.

5. BRANCHY SOWTHISTLE.

Plate 116. Fig. 5.

SMOOTH SOWTHISTLE.

Character of the Species.

Sonchus oleraceus lævis.

The Stalk is branched ; the Leaves are deep sinuated ; and the footstalks of the Flowers are downy.

Fig. 5. a b.

THIS is an Annual ; or, if we may be allowed a new term, a MENSAL Plant ; for it will grow from seed, to flowering in about thirty days ; and has in a summer many generations. Had one of the autumnal plants a voice, it might say with truth, My grandfather's great grandfather was born this last spring ; and my father has manured the ground wherein I grow : so quick is the shoot, and so short the duration of this kind of plants.

It is a yard high ; the Leaves are of a bluish green ; and the Flowers are yellow.

6. CLUSTERY SOWTHISTLE.

Plate 116. Fig. 6.

Character of the Species.

Sonchus Alpinus.

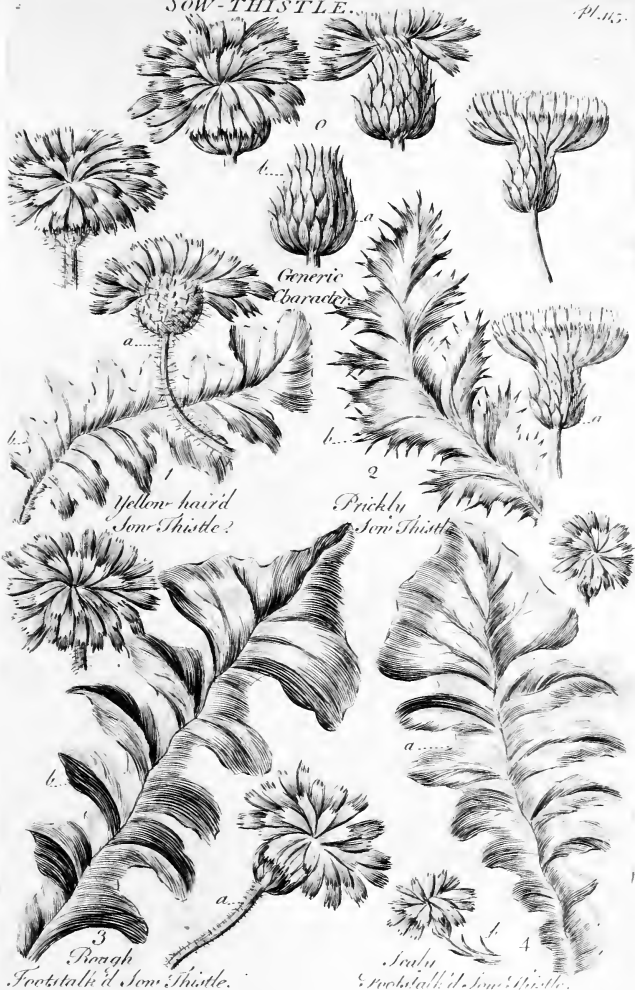
The Leaves are winged and have a great spear'd lobe at the end ; the Flowers grow in clusters upon downy footstalks.

Fig. 6. a b.

THIS

SOW-THISTLE.

Pl. 115.







SOW-THISTLE.
2.

Pl. 100



5
*Branchy
Sow Thistle?*



6
*Clustery
Sow Thistle.*



7
Giant Sow Thistle?



8
*Lanced
Sow Thistle.*



9
*Delicate
Sow Thistle.*

THIS is an Annual, native of the Swiss and German hills, and flowers in August. A stately, singular, and very noble plant. The stalk is whitish, downy, and five feet high. The Leaves are whitish, and the Flowers are blue.

7. GIANT SOW THISTLE.

Plate 116. Fig. 7. MARSH TREE SOWTHISTLE.

Character of the Species.

Sonchus palustris.

The Flowers grow in an umbrella'd form, and have downy footstalks; and the Leaves are sinuated.

THIS is a Perennial; native of our marshes; and flowers in July: it is seven feet high: the Stalk is pale green: the Leaves are of a good green on the upper side, but pale and whitish underneath: the Flowers are yellow.

8. LANCED SOW THISTLE.

Plate 116. Fig. 8.

Character of the Species.

Sonchus Sibiricus.

The Leaves are lanced, undivided, and have no footstalks.

Fig. 8. *a b.*

THIS is a Perennial, native of Norway and of Siberia, and flowers in August: the Stalk is red: the Leaves are of a fine green: the Flowers are of a very delicate blue.

9. DELICATE SOW THISTLE.

Plate 116. Fig. 9.

Character of the Species.

Sonchus tenerrimus.

The Leaves are divided into fine delicate segments, and the Cups are hairy.

Fig. 9. *a b.*

THIS is an Annual; native of the warmer parts of Europe, and is a very pretty plant: it flowers in June: the stalk is pale: the Leaves are of a faint green: the Cups are covered with white hairs: and the flowers are yellow.

G E N U S II.

WAY WEED.

CATANANCHE.

Character of the Genus.

The Cup is formed of numerous loose Scales with permanent hollow membraneous heads.

1. BLUE WAY WEED.

Plate 117. *a a b.*

Plate 117. Fig. 1.

Character of the Species.

Catananche cærulea.

The lower Scales in the Cup are oval; the florets form but a single range.

Fig. 1. *a b.*

THIS is an Annual, native of the warmer parts of Europe, and flowers in July: it is two feet and a half high: the Stalk is pale: the Leaves are of a faint green: and the Flowers are of a delicate structure, and fine blue: it is so frequent by road sides in Italy, that it has a name expressing the Wayside-weed.

2. NERVOUS WAY WEED.

Plate 117. Fig. 2.

Character of the Species.

Catananche lutea.

The Leaves are oblong and dented; and have large strong ribs. The lower scales in the cup are lanced.

Fig. 2. *a b.*

THIS is an Annual, native of the East, and flowers in June: the Stalk is pale: the Leaves are of a strong and fine green on the upper side, but paler underneath: the flowers are of a very beautiful yellow.

3. LA-



Generic Character.

1 Blue Mayweed?

2 Nervous Mayweed?

3 Lacinated Mayweed?

THE UNIVERSITY OF CHICAGO

PHILOSOPHY DEPARTMENT

1950-1951

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PHILOSOPHY 115

3. LACINATED WAY WEED.

Plate 117. Fig. 3.

Character of the Species.

Catananche Græca.

The Leaves are cut into many irregular segments.

Fig. 3. a.

THIS also is an Annual, native of the Greek islands, and flowers among the damp rocks about the shore in June and July: the Stalk is whitish: the Leaves are of a greyish green: the Flowers delicately yellow.

G E N U S III.

G O S M O R E.

H Y P O C H Æ R I S.

Character of the Genus.

The Cup is swollen, and rounded at the Base: the Scales of it are lanced and sharp pointed.

Plate 118. a a b.

1. LONG-ROOTED GOSMORE.

Plate 118. Fig. 1. LONG-ROOTED HAWKWERD.

Character of the Species.

Hypochaeris radicata.

The Stalk is branched and naked, but for a few Films: the Leaves are sinuated.

Fig. 1. a b.

THIS is a Perennial, native of our Pastures, and common as almost any Plant which grows in them: it flowers in June. The Leaves rise only from the root: they are of a coarse yellowish green: the Stalk is yellowish: the Flowers are gold yellow. The Seeds float in the air with a feathery down; and this is what our old English writers distinctly called Gosmore. The term has been since applied to the down of any Seed.

72 THE VEGETABLE SYSTEM.

2. STINGING GOSMORE.

Plate 118. Fig. 2.

Character of the Species.

Hypochæris urens.

The Stalk is leafy and branched : the Leaves are dented, and the Cups are hairy.

Fig. 2. *abc.*

THIS is a Biennial, native of Sicily, and flowers in August : the Leaves are of a dusky green ; the Stalks is paler : the Flowers are yellow : their cups sting like nettles.

3. DAISY-EAV'D GOSMORE.

Plate 118. Fig. 3.

Character of the Species.

Hypochæris achyrophonus.

The Leaves are obtuse and dented : the cup is covered with long hairs.

Fig. 3. *ab.*

THIS is an Annual, native of the Greek Islands, and flowers in July : the Leaves are of a bluish green, and slightly hairy : the Stalk is pale ; the Flowers are very large and yellow ; and their Cups are remarkably hairy.

4. LANCED LEAV'D GOSMORE.

Plate 118. Fig. 4.

Character of the Species.

Hypochæris montana.

The Leaves are lanced and dented : the Stalk is leafy, but supports only one Flower.

Fig. 4. *a b.*

THIS is a Biennial, native of the mountains of Savoy, and flowers in August : the Stalk is two feet high, though it supports only a single Flower : the Leaves are of a bright fresh green : the Flower is yellow.

5. SPOT-



Generic Character.





5. SPOTTED GOSMORE.

Plate 118. Fig. 5.

Character of the Species.

Hypochæris maculata.

The Stalk is naked, but for slight films, and has a single branch : the Leaves are oblong oval.

Fig. 5. *a b*.

THIS is a Biennial, native of our healthy grounds, and flowers in July : the Leaves are of a faint green ; hairy, and often spotted with black : the Stalk is greyish, and the Flower is of a delicate pale yellow.

6. GLOSSY GOSMORE.

Character of the Species.

Hypochæris glabra.

The Leaves are smooth and sinuated : the Stalk is leafless.

Fig. 6. *a b*.

THIS is an Annual, native of Holland, and flowers in August. The Leaves are a fresh green : the Stalk is brownish, and the Flowers are yellow.

G E N U S IV.

L E T T U C E.

L A C T U C A.

Character of the Genus.

The Cup is oblong and cylindric : its scales are numerous, and have sharp points.

Plate 119. *a a b*.

S C E N T E D L E T T U C E.

Plate 119. Fig. 1.

GREAT WILD LETTUCE.

Character of the Species.

Lactuca virofa.

The Leaves are prickly on the back of the middle rib, and are variously divided.

Fig. 1. *a b c*.

THIS is a Biennial, native of our clay banks, and flowers in August: it is five feet high: the first, or radical Leaves, are undivided: those on the Stalks are more or less jagged: the Flowers are small, and of a pale yellow. They did ill who affixed poisonous to this Plant: I have found it a safe, tho' powerful Narcotic.

2. SHORT-LEAV'D LETTUCE.

Plate 118. Fig. 2.

GARDEN LETTUCE.

Character of the Species.

Lactuca sativa.

The Leaves are thornless, short, and obtuse: the Flowers grow in spreading clusters.

Fig. 2. *ab.*

THIS is an Annual raised in our gardens with infinite variety; but its origin is from Italy, where there are wild Plants now, very like what we call the common Cabbage Lettuce, from these have arisen the better Cabbage Lettuces, and from those the Silesia, Cos, and all the other varieties, by saving Seed from Plants of a peculiar aspect. This, in its wild state, is two feet high: the Stalk is slender; the Leaves are of a yellowish green, and the Flowers are pale yellow.

3. OAK LETTUCE.

Plate 119. Fig. 3.

Character of the Species.

Lactuca quercina.

The Leaves are thornless, and deeply sinuated in the winged manner.

Fig. 3. *a.*

THIS is a Perennial, native of the northern parts of Europe, and flowers in July and August. The Stalk is pale: the Leaves are of a faint green, and the Flowers are yellow.

4. SWORD-LEAV'D LETTUCE.

Plate 119. Fig. 4.

Character of the Species.

Lactuca Canadensis.

The Leaves are sword-shaped, and ferrated at the edges, but destitute of thorns.

Fig. 4. *ab.*

THIS

LETTUCE.

Pl. 119.



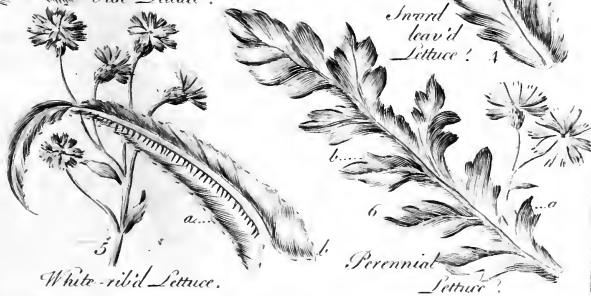
Scented Lettuce?

Short-leav'd Lettuce.



Oak Lettuce?

Sword-leav'd Lettuce?



White-rib'd Lettuce.

Perennial Lettuce?

THE STATE OF NEW YORK

IN SENATE,
January 1, 1891.

REPORT
OF THE

COMMISSIONERS OF THE LAND OFFICE,
IN ANSWER TO A RESOLUTION PASSED BY THE SENATE,
MAY 1, 1890.

ALBANY:
J. B. LIPPINCOTT & CO., PRINTERS,
1891.

THE STATE OF NEW YORK
IN SENATE,
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ALBANY:
J. B. LIPPINCOTT & CO., PRINTERS,
1891.

THIS is an Annual, native, as it is thought, of Canada; but I suspect it only degenerated from scattered seed of the Cos Lettuce: it is four feet high: the Leaves are of a fresh green: the Flowers are yellow.

5. WHITE RIB'D LETTUCE.

Plate 119. Fig. 5.

Character of the Species.

Lactuca saligna.

The Leaves have the great rib white, and are thorny at the Back; and they are spread at the Base.

Fig. 5. a.

THIS is a Biennial, native of the warmer parts of Europe, and flowers in August: the Stalk is five feet high, and brown; the Leaves are deep green: the Flowers are yellow.

6. PERENNIAL LETTUCE.

Plate 119. Fig. 6.

Character of the Species.

Lactuca perennis.

The Leaves are linear, deeply sinuated in the winged manner, and the jaggs are cut again.

Fig. 6. a b.

THIS is a Perennial, native of France and Germany, and flowers in August: the Stalk is usually reddish: the Leaves are deep green; and the Flowers are yellow.

G E N U S V.

H A W K W E E D.

H I E R A C I U M.

Character of the Genus.

The cup is cylindric, but rounded at the Base: its Scales are very numerous and unequal, but all linear and pointed; and they are laid longitudinally one over another.

Plate 102. a a b.

Ir

It has been a custom to divide this numerous Genus according to their naked or leafy Stalks : but the distinction between Leaf and Film upon the Hawkweed Stalk is too indeterminate : Culture also will sometimes give an extraordinary branch ; and a poor soil will withhold the usual Films. We must therefore depend on the specific distinctions which are founded on more stable parts, and will not vary.

B L O T T E D H A W K W E E D.

Plate 120, Fig. 1.

GOLDEN LUNGWORT,

Character of the Species.

Hieracium murorum.

The Leaves are oval, woolly, and spotted : the Cups are almost smooth.

Fig. 1. *a b.*

THIS is a Biennial, native of our own country, and common on old walls : the Leaves are spotted with irregular marks of black, and covered very thick with long white hairs : the Stalk is two feet high : the Flowers are yellow.

THE Leaves of this Plant vary greatly : they are broader or narrower, and more or less indented, according to the situation ; but the essential characters continue always the same.

2. H A R S H - C U P ' D H A W K W E E D.

Plate 120. Fig. 2.

Character of the Species.

Hieracium paludosum.

The Cups are covered with long harsh hairs : the Leaves are smooth.

Fig. 2. *a b.*

THIS is a Biennial, native of the marshy grounds at the bottoms of hills in Switzerland and Germany ; and flowers in July. The Leaves are of a fine fresh green, perfectly smooth, and free from spots : the Flowers are yellow, and the hairs upon their Cups are black.

3. B U S H Y

HAWK WEED

Pl. 120.



Generic Character.



Blotted Hawkweed.

Starb
Capit
Hawkweed.



Bushy
Hawkweed.

Umbrell'd
Hawkweed.



3. BUSHY HAWKWEED.

Plate 120. Fig. 3. BROAD LEAV'D BUSHY HAWKWEED.

Character of the Species.

Hieracium sabaudum.

The Leaves are oval-lanced, indented, and embrace the Stalk. The Flowers are numerous.

Fig. 3. a. b.

THIS is a Perennial, native of the hilly woods and thickets throughout England, and flowers in July: it is three feet high: the Leaves are of a dull green, and the Flowers are of a very fine and glowing yellow.

4. UMBRELLA'D HAWKWEED.

Plate 120. Fig. 4. NARROW-LEAV'D BUSHY HAWKWEED.

Character of the Species.

Hieracium umbellatum.

The Leaves are linear, lanced, and dented: the Flowers grow in a kind of umbrella.

Fig. 4. a. b.

THIS also is a Perennial, native of our thickets: it flowers in August: the Stalk is two feet and a half high: the Leaves are of a bright green, and the Flowers of a fine strong yellow.

5. HARPED HAWKWEED:

Plate 121. Fig. 5.

Character of the Species.

Hieracium lyratum.

The Leaves are harped and smooth: the Cups and Footstalks of the Flowers are hairy.

Fig. 5. a. b. c.

THIS is a Biennial, native of Siberia, and flowers in August: it is a foot and a half high. The Stalk is red at the bottom, green upwards, and at the top whitish and hairy. The Leaves are of a fine fresh green: the Flowers are yellow.

6. CLAMMY HAWKWEED.

Plate 121. Fig. 6.

Character of the Species.

Hieracium glutinosum.

The Leaves are sinuated, and almost harped, and rough: the Flowers form a broad cluster.

Fig. a b c.

THIS is a Biennial, native of France and Germany, and flowers in June. The Stalk is of a pale faint green: the Leaves are rough and rugged, and are often tinged with brown: they are always moist and clammy to the touch. The Flowers are small, but of a very delicate yellow.

7. WOOLLY FOOTSTALK'D HAWKWEED.

Plate 121. Fig. 7.

Character of the Species.

Hieracium Kalmii.

The Leaves are lanced and dented: the Footstalks of the Flowers are white and woolly.

Fig. 7. a b.

THIS is a Biennial, native of North-America, and flowers in August: It is two feet and a half high. The Leaves are of a pale green, and the Stalk is usually reddish: the Flowers are of a pale, but delicate yellow.

8. HARSH HAWKWEED.

Plate 121. Fig. 8.

Character of the Species.

Hieracium sprengerianum.

The Leaves half embrace the Stalk, and are nurl'd along the Edge, and covered with harsh hairs. The Stalk divides into many branches.

Fig. 8. a b.

THIS is a Biennial, native of Spain and Portugal, and by far the most august of all the Hawkweeds: the Stalk is reddish: the Leaves are of a fine strong green: the Flowers are of a gold yellow, and blow in August.

9. FEW-

HAWKWEED.

2.

17. 121.





9. FEW-FLOWER'D HAWKWEED.

Plate 121. Fig. 9.

Character of the Species.

Hieracium Blattaroides.

The Flowers stand singly in loose Cups: the Leaves embrace the Stalk, and are lanced and dented.

Fig. 9. *ab.*

THIS is a Biennial, native of the Pyrenæan mountains, and flowers in June. The Stalk is brown; the Leaves are of a deep green, but rendered somewhat paler, by a few scattered hairs. The Flowers are large and yellow.

10. AMPLEXICAUL HAWKWEED.

Plate 122. Fig. 10.

Character of the Species.

Hieracium amplexicaule.

The Leaves are hearted, lightly dented, and embrace the Stalk. The Flowers stand singly on their Footstalks.

Fig. 10. *ab.*

THIS is a Biennial, native of the Pyrenees, and flowers in July. The Stalk is green and tender: the Leaves are of a dusky and somewhat brownish green; and the Flowers are of a delicate yellow.

11. WAVY HAWKWEED.

Plate 122. Fig. 11.

Character of the Species.

Hieracium cerinthoides.

The radical Leaves are oval and dented; those on the Stalk are oblong and waved.

Fig. 11. *ab.*

THIS is a Perennial, native also of the Pyrenees, and flowers in August; the Stalk is thick, and naturally reddish: the Leaves are of a bluish green; the Flowers are of a deep, but not unpleasing yellow.

12. GRASS-

80 THE VEGETABLE SYSTEM.

12. GRASSY HAWK WEED.

Plate 122. Fig. 12.

Character of the Species.

Hieracium porrifolium.

The Leaves are narrow and grassy : the Stalk is extremely branched.

Fig. 12. *a b.*

THIS is a Biennial, native of Italy, a very singular and pretty Plant, and flowers in August. The Leaves are perfectly grassy in form and colour : the Stalk rarely exceeds ten inches in height : the Flowers are delicately yellow.

13. CLUSTERY HAWK WEED.

Plate 122. Fig. 13.

Character of the Species.

Hieracium paniculatum.

The Leaves are lanced, dentated, and smooth : the Flowerstalks are thready.

Fig. 13. *a b.*

THIS is an Annual, native of Canada, a tender Plant, of ten or twelve inches in height. The Stalk is brown and hairy : the Leaves are of a fine green, and smooth : the flowers are of a very dusky yellow.

14. BARBED HAWK WEED.

Plate 122. Fig. 14.

Character of the Species.

Hieracium Pyrenaicum.

The Leaves are barbed, or notch'd backward : the Stalk is simple.

Fig. 14. *a b.*

THIS is an elegant little Plant, native of the Pyrenean mountains, and flowers in July. The Leaves are of a deep, strong, and yet lively green : the Stalk is tender, and also green. The Flowers are delicately yellow.

15. SPIKED

HAWKWEED.

3



Amplexicaul Hawkweed.



Hairy Hawkweed.



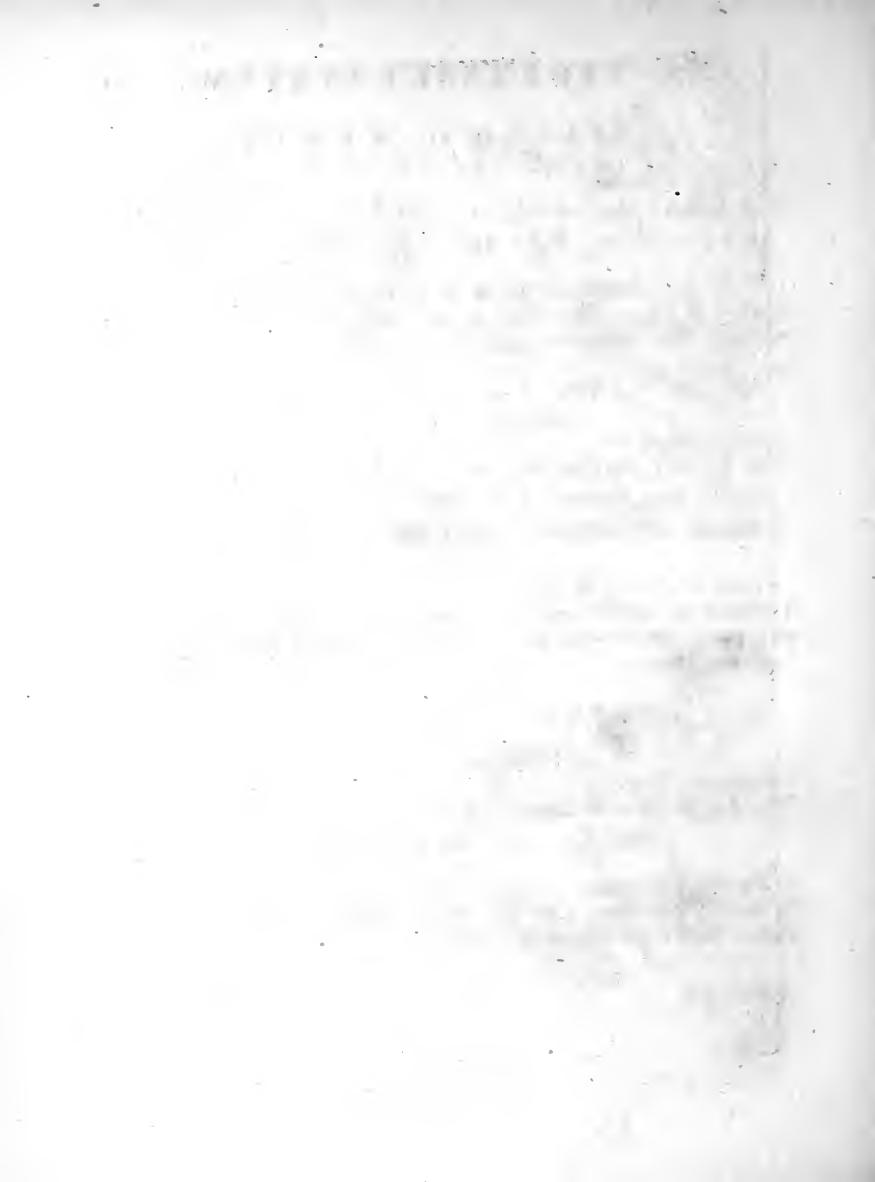
Grassy Hawkweed?



Clustery Hawkweed.



Barbed Hawkweed?



15. SPIKED HAWKWEED.

Plate 123. Fig. 15.

Character of the Species.

Hieracium præmorsum.

The Leaves are woolly, oval, and dented: the Flowers are placed in a spike upon a branched leafless Stalk.

Fig. 15. *ab*.

THIS is a Perennial, native of Switzerland and Hungary, and flowers in July. The Stalk is pale: the Leaves are woolly and whitish: the Flowers are yellow.

16. OVAL-LEAVED HAWKWEED.

Plate 123. Fig. 16.

Character of the Species.

Hieracium dubium.

The Leaves are smooth and oval, but somewhat oblong: there are runners from the root, and the Stalk is naked, but supports several Flowers.

Fig. 16. *ab*.

THIS is a Perennial, native of Sweden, and flowers in July. The Leaves are of a faint green, and scarce at all hairy. The Stalks are also pale: the Flowers are of the same delicate yellow with our common Mouse-Ear.

17. LANCED LEAVED HAWKWEED.

Plate 123. Fig. 17.

Character of the Species.

Hieracium auricula dictum.

The Leaves are lanced: there are runners from the root, and the Stalk has many Flowers.

Fig. 17. *abc*.

THIS is a Perennial, native of France and Germany, and flowers in June. The Leaves are of a dusky green: the Stalk is fourteen inches high: the Flowers are yellow.

18. ORANGE HAWK WEED.

Plate 123. Fig. 18.

GRIM THE COLLIER.

Character of the Species.

Hieracium aurantiacum.

The Leaves are oval and hairy : the Flowers stand in a great cluster on a naked Stalk.

Fig. 18. *a b.*

THIS is a Biennial, native of the East ; but has been long an inhabitant of our gardens : the Leaves are dusky, and are covered with long hairs ; the Stalk is pale, and the Flowers are of an extremely strong orange colour, tending to scarlet. It flowers all summer.

19. VARIOUS LEAVED HAWK WEED.

Plate 123. Fig. 19.

Character of the Species.

Hieracium Chondrilloides.

The radical Leaves are lanced and undivided : those on the Stalk are deep cut backwards.

Fig. 19. *a b.*

THIS is a Biennial, native of the North of Europe, a Plant of five inches high : the Leaves are of a faint green : the Stalk is paler, and the Flowers are pale yellow.

20. VIOLET HAWK WEED.

Plate 123. Fig. 20.

Character of the Species.

Hieracium Gronovii.

The Leaves are egg-shaped, undivided, a little hairy, and violet coloured underneath : the Flowers are clustered.

Fig. 20. *a b.*

THIS is a Perennial, native of Pensylvania, a Plant of ten inches high, flowering in August. The Leaves are of a deep green, and the Flowers of a strong yellow.

21. SMALL-

HAWKWEED.

4

Pl. 123.



Spiked Hawkweed.



Oval-leaved Hawkweed.



Lance-leaved Hawkweed.



Orange Hawkweed.



Various-leaved Hawkweed.



Violet Hawkweed.



Small-leaved Hawkweed.

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21. SMALL-CLUSTERED HAWKWEED.

Plate 123. Fig. 21.

Character of the Species.

Hieracium Gmelini.

The Leaves are oval, ferrated, and smooth: the Flowers stand in little clusters

Fig. 21. *a b.*

THIS is a Perennial, native of Siberia, and flowers in August: the Leaves are of a yellowish green, the Stalks are also green, and the Flowers pale yellow.

22. CREEPING HAWKWEED.

Plate 124. Fig. 22.

MOUSE-EAR.

Character of the Species.

Hieracium pilosella dictum.

The Leaves are oval and undivided; there are runners from the Root, and only one Flower on the Stalk.

Fig. 22. *a b.*

THIS is a Perennial, common on our banks and walls, and in dry hilly pastures, and flowers from May to Michaelmas: the Leaves are of a dark green, and white underneath, and covered with white hairs; the Flowers are large, and of a pale yellow.

23. RUGGED HAWKWEED.

Plate 124. Fig. 22.

Character of the Species.

Hieracium incanum.

The Leaves are lanced, rugged, and just dented: there are no runners, and the Stalk has only one Flower.

Fig. 23. *a b.*

THIS is a Biennial, native of the hills in Germany and Switzerland, and flowers in August: the Leaves are of a pale green, with a tinge of brown, and they are a little hairy. The Stalk is greyish, and the Flower is of a strong yellow.

24. ROUGH

84 THE VEGETABLE SYSTEM.

24. ROUGH HAIR'D HAWKWEED.

Plate 124. Fig. 24.

Character of the Species.

Hieracium Hedypnoides.

The Leaves are deep cut, clammy and cover'd with harsh Hairs: the Stalk supports but one Flower.

Fig. 24. *a b.*

THIS is a Perennial, native of France and Germany, and flowers in August: the Leaves are of a faint and yellowish green, but they are rendered greyish by some long white hairs. The Stalk is paler, and the Flower is of a very fine gold yellow.

25. WOOLLY CUPPED HAWKWEED.

Plate 124. Fig. 25.

MOUNTAIN MOUSE-EAR.

Character of the Species.

Hieracium Alpinum.

The Leaves are oblong, waved, and hairy: the cup is woolly.

Fig. 25. *a b.*

THIS is a Perennial, native of the Welch mountains, and flowers in August: the Leaves are of a deep green, but covered with long hairs, which give them a whitish aspect: the Stalk is five inches high, and pale; the cup is covered with soft hairs, like wool, the Flower is pale yellow.

THIS Plant affords abundant proof of the uncertainty there is in the method of dividing the Hawkweeds, according to the characters of the Stalks; naturally the Stalk of this is naked, or has a single thread. RAY has observed, in gardens, it has many such; here, at Bays-water, they are become broad and filmy, and there is a bud for a second Flower.

26. PAINTED HAWKWEED.

Plate 124. Fig. 26.

Character of the Species.

Hieracium venosum.

The Leaves are wedg'd, and beautifully veined: the Stalk is thick and naked.

Fig. 26. *a b.*

THIS

HAWKWEED.

5

Pl. 124



Creeping Hawkweed.



Rugged Hawkweed.



Rough-hair'd Hawkweed.



Pointed Hawkweed.



Woolly cupped Hawkweed.

THE HISTORY OF THE UNITED STATES

OF THE UNITED STATES OF AMERICA
FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME
BY JAMES M. SMITH
IN TWO VOLUMES
VOL. I
NEW YORK: PUBLISHED BY J. B. LIPPINCOTT & CO., 15 N. 4TH ST. 1854

THIS is a Perennial, native of Virginia, a singular and beautiful Plant : it flowers in September : the Leaves are hairy, and have large red veins and spots. The Stalk is greyish, and the Flower pale yellow.

G E N U S VI.
G O L D T H I S T L E.

S C O L Y M U S.

Character of the Genus.

The cup is oval, and its Scales are prickly.

Plate 125. Fig. *a b*.

1. ANNUAL GOLD THISTLE.

Plate 125. Fig. 1.

Character of the Species.

Scolymus maculatus.

The edges of the Leaves are thin and delicate, but armed with long white thorns.

Fig. *a b*.

THIS is an Annual, native of France and Italy, and flowers from July to October, a noble, specious, and most singular Plant. It is five feet high, and vastly branched: the Leaves are of a delicate bright green, and the Flowers are gold yellow. Its thorny Leaves caused it to be called a Thistle, but most improperly.

2. PERENNIAL GOLD THISTLE.

Plate 125. Fig. 2.

Character of the Species.

Scolymus Hispanicus.

The edges of the Leaves are thick, and the Spines are brownish.

Fig. 2. *a b*.

THIS is a native of Italy, Spain, and France; a very handsome Plant. The Stalk is pale and branched: the Leaves are deep green, and the Flowers gold yellow.

G E N U S VII.

S U C C O R Y.

C I C H O R E U M.

Character of the Genus.

The cup is cylindric, and the outer range of its scales is loose and leafy.

Fig. 3. *a b.*

1. S I N U A T E D S U C C O R Y.

Plate 225. Fig. 3.

WILD SUCCORY.

Character of the Species.

Cichoreum intybus dictum.

The Leaves are deeply sinuated, and the Stalk is simple.

Fig. 3. *a b.*

THIS is a Perennial, common by our road sides in dry places, and flowers in August. It is two feet high: the Leaves are of a deep dusky green, and the Flowers are blue.

2. W A V Y S U C C O R Y.

Plate 125. Fig. 4.

ENDIVE.

Character of the Species.

Cichoreum endivia dictum.

The Leaves are waved and crenated; and the Stalk is simple.

Fig. 4. *a b.*

THIS is an Annual, native of Spain, but now abundant in our gardens, and abundantly altered in the form and cutting of its Leaves. The Stalk is two feet and a half high: the Leaves are pale green, and the Flowers are blue.

3. T H O R N Y S U C C O R Y.

Plate 125. Fig. 5.

Character of the Species.

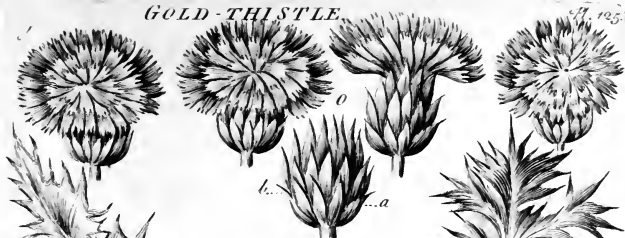
Cichoreum spinosum.

The Stalk splits all ways in a forked manner, and the Leaves are prickly.

THIS

GOLD-THISTLE.

Pl. 125.



Generic Character.

Annual Gold-Thistle.



SUCCORY.

Generic Character.

Perennial Gold-Thistle.



Sinuated Succory.



Wavy Succory.



Thorny Succory.

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THIS is a Biennial, native of Sicily, and flowers upon the sandy sea side hills in August: it is two feet high: the Leaves are of a bluish green the Stalks are whitish, and the Flowers of a delicate blue.

GENUS VIII.

DANDELION.

LEONTODON.

Character of the Genus.

The cup is bell-shaped: the three lower ranges of Scales are loose, shorter by degrees, and leafy.

Plate 126. *oa b.*

1. CURLED DANDELION.

Plate 126. Fig. 1. COMMON DANDELION.

Character of the Species.

Leontodon taraxacum dictum.

The Leaves are sinuated backward: the lower scales of the Cup curl downwards.

Fig. 1. *a b.*

THIS is a Perennial, universal in our pastures and gardens, and flowers throughout the year. The Leaves are of a fresh green: the Flowers are yellow.

2. ABRUPT DANDELION.

Plate 126. Fig. 2. YELLOW DEVIL'S BIT.

Character of the Species.

Leontodon Autumnale.

The Leaves are smooth and dented: the Scales are upright: the Stalk is filmy.

Fig. 2. *abc.*

THIS is a Perennial, frequent every where in our pastures, and flowers in August: the Leaves are of a fresh bright green: the Stalk is somewhat yellowish: the Flowers are yellow.

3. SWORD-

3. SWORD-LEAV'D DANDELION.

Plate 126. Fig. 3.

Character of the Species.

Leontodon Dandelion.

The Leaves are long, narrow, sword-shaped, and undivided.

Fig. 3. *a b*.

THIS is a Biennial, native of Virginia, and flowers in September: the Leaves are of a strong deep green: the Stalk is pale, and toward the top is somewhat hairy and clammy. The Flowers are yellow.

4. HARSH DANDELION.

Plate 126. Fig. 4.

ROUGH DANDELION.

Character of the Species.

Leontodon hispidum.

The Leaves are dented, and covered with harsh hairs, and the Cup is hairy.

Fig. 4. *a b*.

THIS is a Perennial, frequent in our pastures, and flowers in July: the Leaves are of a yellowish green: the Stalk is a foot high, and of the same colour: the Flower is of a tawney yellow. The Leaves in this Plant vary greatly in the degree of indenting, and hairyness; but the Species is the same.

5. OVAL LEAV'D DANDELION.

Plate 126. Fig. 5.

Character of the Species.

Leontodon bulbosum.

The Leaves are oval, but somewhat oblong and smooth: the cups are smooth, but the Footstalks of the Flowers are hairy.

Fig. 5. *a b c*.

THIS is a Perennial, native of Italy, and flowers in July. The Root is thick and rounded: the Leaves are of a pale green, and the Flowers are yellow.

6. DOWNY

DANDELION.

Pl. 126.



Carl'd
Dandlion.

Abrupt Dandelion.

*Sword leav'd
Dandelion.*

Harsh Pandey

Oral David
Pandemon.

Journal
Production

6. DOWNY DANDELION.

Plate 126. Fig. 6.

Character of the Species.

Leontodon tuberosum.

The Leaves are dented, and covered with a fine down: the cup is slender.

Fig. 6. *a b.*

THIS is a Perennial, native of the south of France, and flowers in August. The Root is thick and tuberous: the Leaves are of a whitish green, and have a downy aspect. The Flowers are of a pale yellow.

G E N U S IX.

V I P E R S G R A S S.

S C O R Z O N E R A.

Character of the Genus.

The Cup is conic: the inner Scales are long; the two outer ranges are much shorter, and they have all a thin, pale, membranaceous edge.

Plate. 127. *a a b.*

1. BROAD-LEAV'D V I P E R S G R A S S.

Plate 127. Fig. 1.

Character of the Species.

Scorzonera humilis.

The radical Leaves are broad, and have great ribs: the Stalk supports only one Flower.

Fig. 1. *a b.*

THIS is a Perennial native of the pastures of France and Germany, and flowers in August. The radical Leaves are of a very strong deep green: the Stalk is paler, and has a few films: the Flower is large, and of a fine yellow.

2. AMPLEXICAUL VIPERS GRASS.

Plate 127. Fig. 2.

Character of the Species.

Scorzonera Hispanica.

The Stalk is branched, and has many Flowers: the Leaves embrace it, and are waved.

Fig. 2. a b.

THIS is a Perennial, native of Spain, and also of Siberia: it flowers in July: the Leaves are of a dull green, and waved at their edges: the Stalk is two feet high, and of the colour of the Leaves: the Flowers are of a fine yellow. This is the Species we should cultivate in gardens for its esculent root.

3. GRASSY-LEAV'D VIPERS GRASS.

Plate 127. Fig. 3.

SCORZONERA.

Character of the Species.

Scorzonera graminifolia.

The Leaves are narrow, flat, and grassy; the Stalk thickens under the Flower.

Fig. 3. a b.

THIS is a Perennial, native of Spain, and some other parts of Europe, and flowers in July; a low but handsome Plant. The Leaves are of a fine fresh green: the Stalk is about ten inches high: it divides near the ground, and is there downy, and thickens toward the Flower: the Cup is brownish, and the Flower is yellow.

4. PURPLE VIPERS GRASS.

Plate 127. Fig. 4.

Character of the Species.

Scorzonera purpurea.

The Stalk is branched: the Leaves are grassy, flat, and waved: the Footstalks of the Flowers do not swell.

Fig. 4. a b.

THIS is a Perennial, native of Germany and flowers in August. It is two feet high: the Stalk is pale: the Leaves are of a pleasing pale green. The Flowers are of a very delicate blue purple.

5. SWORD-



Generic Character.

Broad leaved
Vipers Grass.

Implexicaul
Vipers Grass.

Grassy leaved
Vipers Grass.

Purple
Vipers Grass.



5. SWORD-LEAV'D VIPERS GRASS.

Plate 128. Fig. 5.

Character of the Species.

Scorzonera angustifolia.

The Leaves are long, narrow, undivided, keel'd, and sharp pointed.

Fig. 5. a b.

THIS is a Biennial, native of Portugal, and also of Siberia: it flowers in August: the Leaves are of a coarse but strong green: the Stalk is pale, and the Flowers are of a very beautiful light yellow.

6. SINUATED VIPERS GRASS.

Plate 128. Fig. 6.

Character of the Species.

Scorzonera laciniata.

The Leaves are long, and deeply sinuated; and they are all the way of a breadth.

Fig. 6. a.

THIS is a Biennial, native of France and Germany, and flowers in August. The Leaves are of a delicate, tho' not strong green: the Stalk is pale: the Flowers are of a gold yellow, and their Cups are glossy.

7. DECUMBENT VIPERS GRASS.

Plate 128. Fig. 7.

Character of the Species.

Scorzonera reflexifolia.

The Stalk lies on the ground: the Leaves are obtusely sinuated. The Cups are downy at the top.

Fig. 7. a b c.

THIS is a Biennial, native of Spain and Portugal, a small and humble Plant, and flowers in July: the Leaves are of a very delicate green: the Stalks are reddish; and the Flowers are of a strong fine yellow.

8. DEEP

8. DEEP SINUATED VIPERS GRASS.

Plate 128. Fig. 8.

Character of the Species.

Scorzonera tingitana.

The Leaves embrace the Stalk and are deeply sinuated forward : the jags turning outwards.

Fig. 8. *a b.*

THIS is an Annual, native of Africa, and of the southern parts of Europe, and flowers in August. A very beautiful Plant : the Leaves are of a faint, and somewhat bluish green, extremely elegant in their form and division. The Stalk is very pale, and the Flowers are yellow.

VARIOUS LEAV'D VIPERS GRASS.

Plate 128. Fig. 9.

Character of the Species.

Scorzonera picroides.

The radical Leaves are harped ; those on the Stalk amplexicaul, and undivided.

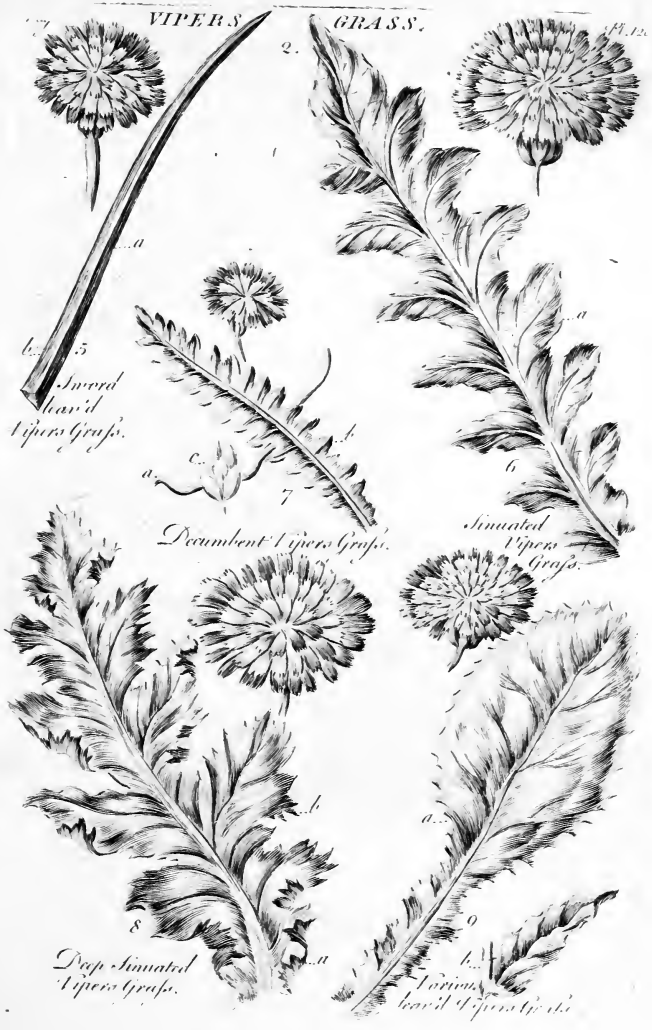
Fig. 9. *a b.*

THIS is an Annual, native of Spain, and flowers in July : the Leaves are of a fine, tho' not strong green : the Stalks are tender, and usually stained with red : the Flowers are yellow.

O R D E R IV.

With the general Cup fringed, or furrounded at the Base with additional and peculiar Scales.

G E N U S





GENUS I.

MAITHEN.

CREPIS.

Character of the Genus.

The Body of the Cup is cylindric, and form'd of a single range of oblong, narrow, pointed, swelling Scales, close set: its fringe is formed of three ranges of short pyramidal films.

Plate 129. *a b.*

1. LACINATED MAITHEN.

Plate 129. Fig. 1.

SUCCORY HAWKWEED.

Character of the Species.

Crepis biennis.

The Leaves are variously lacinated in a winged, and somewhat speary form. The body of the Cup is round, with soft prickles: the Fringe is smooth.

Fig. 1. *a b.*

THIS is a Biennial, common in our pastures, and is the herb our farmers properly call Maithes and Maithen; a name they in some places confusedly give to the Stinking May-weed, and in others to the Adonis. It is a foot and a half high, and flowers in June: the Leaves are of a yellowish green: the Flowers are inconsiderable, but numerous, and of a pale yellow.

2. BROAD-LEAV'D MAITHEN.

Plate 129. Fig. 2.

Character of the Species.

Crepis Alpina.

The Leaves are oblong, pointed, and indented, and embrace the Stalk by a broad Base.

Fig. 2. *a b.*

THIS is a native of the Alps and Pyrenees, an Annual of a foot and a half high ; a singular and very beautiful Plant. The Leaves are of a fresh and fine green, but with some tint of bluish : the Stalk is pale : the Flower is large and yellow : the body of its Cup is green, and armed with short, weak, black spines. The Fringe is of a faded brown.

THIS Plant grows like the Sowthistles, so quick from Seeds to flowering, that here at Bayeswater, between the second of June, and this twenty-eighth of October, I have raised three generations.

3. NAKED STALK'D MAITHEN.

Plate 129. Fig. 3.

Character of the Species.

Crepis nudicaulis.

The Leaves are harsh, lanced, and sinuated : the Stalk supports but one Flower.

Fig. 3. *ab.*

THIS is a Biennial, native of France and Spain ; a Plant of a foot high, flowering in June. The Leaves are of a yellowish green, and are crown'd with dusky sharp-pointed, hard hairs : the Stalk is yellowish ; and the Flower is of a fine yellow.

4. CRIMSON MAITHEN.

Plate 130. Fig. 4.

Character of the Species.

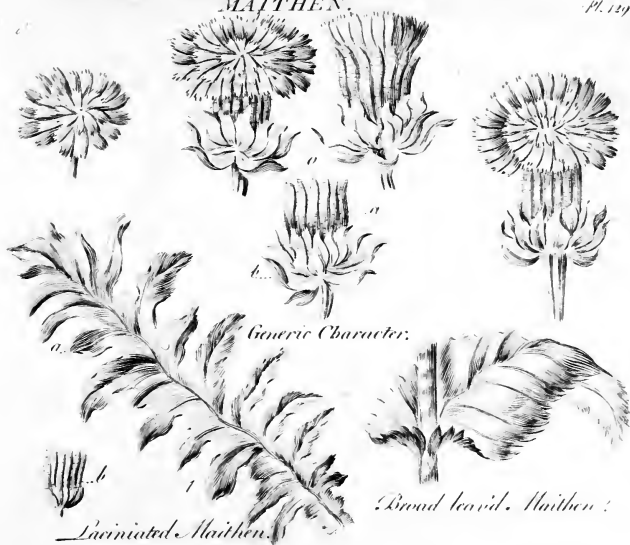
Crepis rubra.

The radical Leaves are deeply and close sinuated : the upper ones are lanced, dented, and amplexicaul.

Fig. 4. *ab.*

THIS is an Annual, an Alpine Plant, singular in the colour of its Flower, and the most beautiful of all this kind : it is a foot high, and flowers in June. The Leaves are of a fine, fresh, but not deep green : the Stalk is pale, and the Flower is of the most elegant pale crimson.

5. P I N-





5. PINNATIFID MAITHEN.

Plate 130. Fig. 5.

Character of the Species.

Crepis burrifolia.

The Leaves are pinnatifid : the Stalk is naked, and has only one Flower.

Fig. 5. *a b.*

THIS is a Perennial, native of Italy and Sicily ; a very pretty little Plant. The Leaves are of a pale green : the Stalk is tender and reddish, and the Flower is of a very delicate pale yellow.

6. BEARDED MAITHEN.

Plate 130. Fig. 6.

BEARDED HAWKWEED.

Character of the Species.

Crepis barbata.

The Fringe is longer than the body of the Cup, and makes a kind of beard.

Fig. 6. *a.*

THIS is a native of the southern parts of Europe ; but has long been a favourite in our gardens, where culture adds often to the singularity of its bearded Cup, by rendering it proliforous, a young Offspring surrounding the Parent Flower. See Plate 12, where this is figured among the Luxuriant in Vegetables.

THE Plant is two feet high : its Leaves are of a dark green, and its Flowers of a bright yellow.

7. PETTY MAITHEN.

Plate 130. Fig. 8.

Character of the Species.

Crepis pygmæa.

The Stalk leans : the Leaves are oval, hairy, undivided, and have Footstalks.

Fig. 7. *a b.*

THIS

THIS is a Biennial native of Italy; a petty Plant, but not without its beauty: the Stalk is weak and red: the Leaves are of a deep green; and the Flowers are of a remarkable light yellow.

8. HOLLOW FRING'D MAITHEN.

Plate 130. Fig. 8.

Character of the Species.

Crepis vesicaria.

The Fringe of the Cup swells into a kind of oval bladder.

Fig. 8. a.

THIS is a Biennial, native of Italy and Switzerland, a singular, and not unhandsome Plant. The Root is thick and fleshy: the Leaves are harped and rough: the Stalk spreads wildly, and the Flowers are yellow.

9. ARROWED MAITHEN.

Plate 131. Fig. 9.

Character of the Species.

Crepis Pulchra.

The Leaves are arrowed and indented: the Footstalks of the Flowers are swelled and turbinate.

Fig. 9. a b.

THIS is an Annual, native of France, and flowers in July. The Stalk is a foot and a half high, and red toward the ground: the Leaves are of a very fine strong green: the Flowers are small, but they are of a beautiful yellow.

10. ALATED MAITHEN.

Plate 131. Fig. 10.

Character of the Species.

Crepis Sibirica.

The Leaves are oval dented, and they have alated, dented, leafy Footstalks.

Fig. 10. a b.

THIS



THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

RESEARCH REPORT

NO. 100

1950

BY

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AND

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THIS is a Biennial, native of Siberia, a very singular Plant, flowering in August. The Stalk is yellowish: the Leaves are of a good green, but with some tinge also of yellow. The Flowers are of a very bright gold colour.

11. GUMMY MAITHEN.

Plate 113. Fig. 11.

Character of the Species.

Crepis testorum.

The Cups are covered with gummy hairs: the radical Leaves are sinuated: the others lanced and deſited.

Fig. 11. *abc.*

THIS is an Annual, native of the warmer parts of Europe, and common there on old walls, and the tops of houses; flowering in July. The radical Leaves are usually red: the Stalk is also of a redish brown: the Leaves on it are of a dusky green, somewhat paler on the underſide, and the Flowers are yellow.

12. HARSH STALK'D MAITHEN.

Plate 131. Fig. 12.

Character of the Species.

Crepis hirta.

The Leaves are harped, and ſpeary at the end: the Stalk is harſh to the touch.

Fig. 12. *at.*

THIS is an Annual, native of France and Germany, and flowers in June: the radical Leaves are of a coarſe green: the Stalk is two feet and a half high, very harſh and yellowish: the Flower is large and yellow.

13. STRONG-SCENTED MAITHEN.

Plate 131. Fig. 13.

Character of the Species.

Crepis foetida.

The Leaves are winged, and their Footſtalks are leafy and indented.

Fig. 13. *ab.*

THIS is a Biennial, native of France, and flowers on their dry waste grounds in August: the Stalk is of a pale green. The Leaves are of a fine strong green, and the Flowers are of a deep yellow.

G E N U S II.

O X - T O N G U E .

P I C R I S .

Character of the Genus.

The body of the Cup is oval, and thick set with Scales: its Fringe is composed of five large hearted leafy Films.

Plate 132. *o a b.*

1. W I D E - F R I N G ' D O X - T O N G U E .

LANG DE BEUF.

Character of the Species.

Picris Echoides.

The Flowers are kept close by the neck of the Cup: the fringe of the Cup is harsh to the touch.

Fig. 3. *a.*

THIS is a Biennial, native of our dry banks and hilly commons, flowering from June to November: the Leaves are of a fresh, but not strong green, and they are covered with a kind of white blisters. The Stalks are often brown; and the Flowers are of a fine yellow. The roughness of its Leaves occasioned our old Writers to call it Wild Bugloss: so little did they attend to the real characters of Plants. We now generally know it by the French Salad name, Lang de Beuf, Ox-tongue, from the oblong shape, and extream roughness of the Leaves.

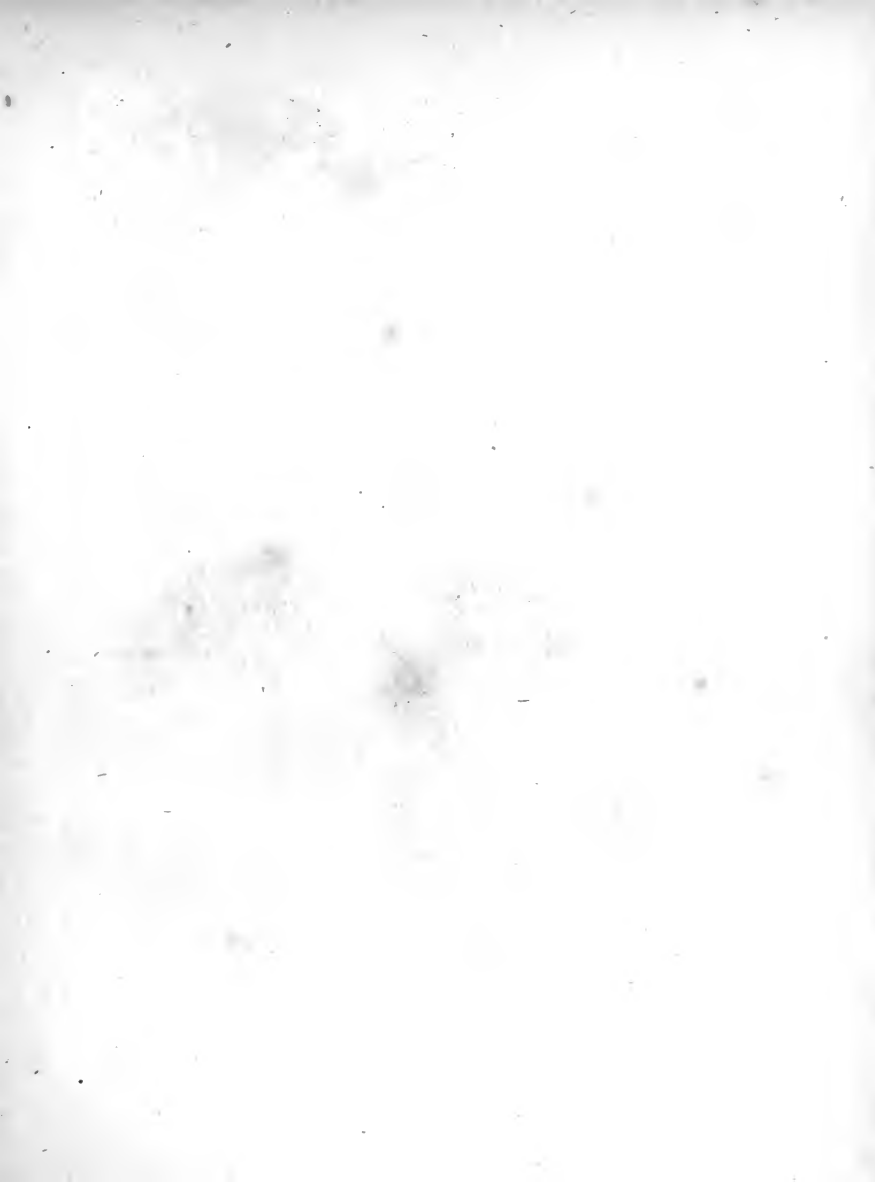
2. B R O A D -

MAITHEN.

3









2. BROAD-FLOWER'D OX-TONGUE.

Plate 132. Fig. 2.

YELLOW SUCCORY.

Character of the Species.

Picris Illicarioides.

The fringe of the Cup is filmy, harsh, and oblong: the Flowers spread wide open.

Fig. 2. a b.

THIS is a Perennial, native of our country, and frequent on the edges of plow'd grounds; flowering in August: the Leaves are of a yellowish green: the Stalk is paler, and both are covered with stiff hairs. The Flowers are large, and of a strong yellow, and they spread wide open.

3. DWARF OX-TONGUE.

Plate 132. Fig. 3.

Character of the Species.

Picris pygmaea.

The fringe of the Cup is loose and leafy, and the Leaves are sinuated.

Fig. 3. a b.

THIS is a very small and very singular Plant, a native of the Pyrenæan mountains: it flowers in August: the Leaves are of a dark blackish green, and slightly covered with long hairs: the Stalks are paler and more hairy; and the Flowers are of a pale and delicate yellow.

4. PINNATIFID OX-TONGUE.

Plate 132. Fig. 4.

Character of the Species.

Picris Asplenoides.

The Leaves are pinnatifid, and the lobes are rounded and alternate.

Fig. 4. a. b.

THIS is a Biennial, native of Ægypt, and flowers in June. The Leaves are of a dull and dusky green: the Stalk is brownish; and the Flowers are yellow.

GENUS

G E N U S III.

S W I N E S S U C C O R Y.

H Y O S E R I S.

Character of the Genus.

The Cup is composed of ten lanc'd, equal, upright, leafy Scales : its Fringe is form'd of very short films.

Plate 133. *a a b.*

1. DWARF SWINES SUCCORY.

Plate 133. Fig. 1.

Character of the Species.

Hyoseris minima.

The Stalk is destitute of Leaves, but divided into branches.

Fig. 1. *a b.*

THIS is a petty Plant, native of our dry and barren grounds ; and flowers in August. The Leaves are of a faint green : the Stalks are pale, and the Flowers are of a very pale and lemon yellow.

2. STRONG-SCENTED SWINES SUCCORY.

Plate 133. Fig. 2.

Character of the Species

Hyoseris foetida.

The Leaves are pinnatifid : the Stalk is simple, leafless, and supports only one Flower.

Fig. 2. *a b.*

THIS is a Biennial, native of Italy and Germany, and flowers in July. The Leaves are of a fresh green : the Stalk is red toward the ground, and green upwards, and is undivided, and a foot high : the Flower is large and yellow.

3. SPREAD-

SWINE S.

SUCCORY.

Pl. 133.



Generic Character.

Dwarf Swine Succory.

Strong-Scented Swine Succory.

Rugged Swine Succory.

Spread leaf'd Swine Succory.

Various leaf'd Swine Succory.

10. 日本銀行の設立と日本の金融政策

日本銀行の設立は、明治維新後の国家建設の一環として行われた。

その目的は、国家の金融を統一し、通貨の発行を管理することである。

日本銀行は、明治7年（1874年）に設立された。

設立当初は、資本は1000万円であった。

その後、資本は増大し、現在のところ、資本は1000億円に達している。

日本銀行は、日本の中央銀行として機能している。

その業務は、通貨の発行、金融政策の実施、銀行の監督などである。

日本銀行は、日本の金融の中心として位置づけられている。

その存在は、日本の経済の発展に大きく貢献している。

日本銀行の歴史は、日本の金融史の一部として記述されている。

その発展は、日本の金融政策の成熟を示している。

日本銀行は、日本の金融の未来を担っている。

その役割は、日本の経済の発展に不可欠である。

日本銀行の存在は、日本の金融の安定を保障している。

その業務は、日本の金融の発展を支えている。

日本銀行は、日本の金融の未来を創造している。

その存在は、日本の金融の発展に不可欠である。

日本銀行は、日本の金融の未来を担っている。

その役割は、日本の経済の発展に不可欠である。

3. SPREAD-LEAV'D SWINES SUCCORY.

Plate 133. Fig. 3.

Character of the Species.

Hyoseris radiata.

The Leaves are pinnatifid: and the extream lobe spreads out its divisions like Rays.

Fig. 3. *a b.*

THIS is a Perennial, native of Spain, and of the South of France, and flowers in July and August. The Leaves are of a fine bright green, but often crimson toward the Base: the Stalk is naked, and a foot high: the Flower is yellow.

4. RUGGED SWINES SUCCORY.

Plate 133. Fig. 4.

Character of the Species.

Hyoseris scabra.

The Leaves are pinnatifid, and have a rugged surface; the Stalk is naked.

Fig. 4. *a b.*

THIS is a Biennial, native of Sicily, a rough, ill-looking Plant, and flowers in August: the Leaves are of a brownish green; the Stalk is also brownish, and the Flower is of a pale yellow.

5. VARIOUS LEAV'D SWINES SUCCORY.

Plate 133. Fig. 5.

Character of the Species.

Hyoseris Virginica.

The first Leaves are oval; those which rise afterwards, are lanc'd, and the last are harp'd: all rise in succession only from the Root; for the Stalk is naked.

Fig. 5. *a b.*

THIS is a Biennial, native of Virginia, a small odd looking Plant, and flowers in August; the Leaves are of a deep green: the Stalk is pale: the Flowers are of a faint yellow.

6. SMOOTH-HEADED SWINES SUCCORY.

Plate 134. Fig. 6.

Character of the Species.

Hyoferis hedypnois dicta.

The heads of Seeds are roundish and smooth: the Foot-stalk of the Flower swells, and the Flower droops.

Fig. 6. *a b.*

THIS is an Annual, native of France and Italy, and flowers in July. The Stalk is of a good green: the Leaves are deep green, and shining: the Flowers are of a pale, but very bright and pleasing yellow.

7. ROUGH HEADED SWINES SUCCORY.

Plate 134. Fig. 7.

Character of the Species.

Hyoferis Rhagadioloides.

The heads of Seeds are globular and hairy: the Stalk is branched and leafy.

Fig. 7. *a b.*

THIS is an Annual, native of France and Portugal, and flowers from the beginning of June to October. The Leaves are of a dusky green: the Stalks have a tinge of brown, and the Flowers are yellow. The Cups have usually a brown tinct above the Fringe, which is handsome.

8. OVAL-HEADED SWINES SUCCORY.

Plate 134. Fig. 4.

Character of the Species.

Hyoferis Cretica.

The heads of Seeds are oblong, oval, and covered with bristles.

Fig. 8. *a b.*

THIS is a Biennial, native of Crete, a very singular and not elegant Plant. The Stalks are pale: the Leaves are of a faint, but not unpleasing green; the Flowers are yellow.

IN

2



Smooth headed
Swines Succory.



Rough headed
Swines Succory.



Oval-headed Swines Succory.

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IN this Genus the character of naked and leafy Stalks is more determinate than in the Hawkweeds ; but even here it cannot be received as the mark of a distinct arrangement : for, in the Dwarf kind here at Bayeswater, there are a few Films upon some of the Stalks ; tho' that is of the number of those in which they are naturally naked.

G E N U S IV.

NIPPLEWORT.

L A P S A N A.

Character of the Genus.

The Cup is oval and ridged, and is formed of eight hollowed, linear, equal sharp-pointed Scales : the fringe consists of six very small pointed Scales, placed alternate with the others.

1. BRANCHY NIPPLEWORT. Plate 135. *a a b*.

Plate 135. Fig. 1.

NIPPLEWORT.

Character of the Species.

Lapsana communis.

The Footstalks of the Flowers are very much branched :
the ridges of the Cup are high

Fig. 1. *a b*.

THIS is a Biennial, native of our dry banks and waste grounds, and flowers in August. The Leaves are of a dusky and very unpleasant green : the Stalk is a yard high, and toward the top is extremely branched. The Flowers are small and yellow.

2. WARTY NIPPLEWORT.

Plate 135. Fig. 2.

Character of the Species.

Lapsana zacynta dista.

The Cup is short, depress'd, ridg'd, and warty : the
Footstalks thicken under the Flowers.

Fig. 2. *a b*.

THIS

104 THE VEGETABLE SYSTEM.

THIS is an Annual, native of Italy, and for the singularity of its aspect, has long held a place in our gardens; it is two feet high: the Leaves are of a fresh and very fine green: the Stalk is usually reddish; and the Flowers are small and yellow: the ridges of the Cup, when the Seeds are ripening, are covered with red warty knots.

3. STARRY NIPPLEWORT.

Plate 135. Fig. 3. STARRY HAWKWEED.

Character of the Species.

Lapsana stellata.

The Leaves are lanced and undivided: the Cup spreads out in Rays.

Fig. 3. a. b.

THIS is an Annual, native of France and Italy, and flowers in July. The Stalk is weak: the Leaves are of a deep, but unpleasing green: the Flowers are of a pale yellow; and the starry rays about the Seeds are brown.

4. HARPED NIPPLEWORT.

Plate 134. Fig. 4.

WART SUCCORY.

Character of the Species.

Lapsana rhagadiolus dicta.

The Leaves are harped; or pinnatifid, with a broad end: the Cup under the Seeds spreads, and is starry.

Fig. 4. a. b.

THIS is a Biennial, native of the East: a very singular Plant, flowering in July. The Stalks are reddish: the Leaves are deep green, and the Flowers are yellow.

5. RUGGED NIPPLEWORT.

Plate 135. Fig. 5.

Character of the Species.

Lapsana chondrilloides.

The Leaves are oblong, rough, and rugged on the surface: the Cup is pyramidal.

Fig. 5. a. b.

THIS is an Annual, native of France and Italy, a rough and robust Plant, two feet and a half high. The Stalk is furrowed and reddish: the Leaves are pale, and the Flowers are yellow.

6. DE-

NIPPLE-WORT

Pl. 135



Branchy Nipplewort.

Warty Nipplewort.



Starry Nipplewort.



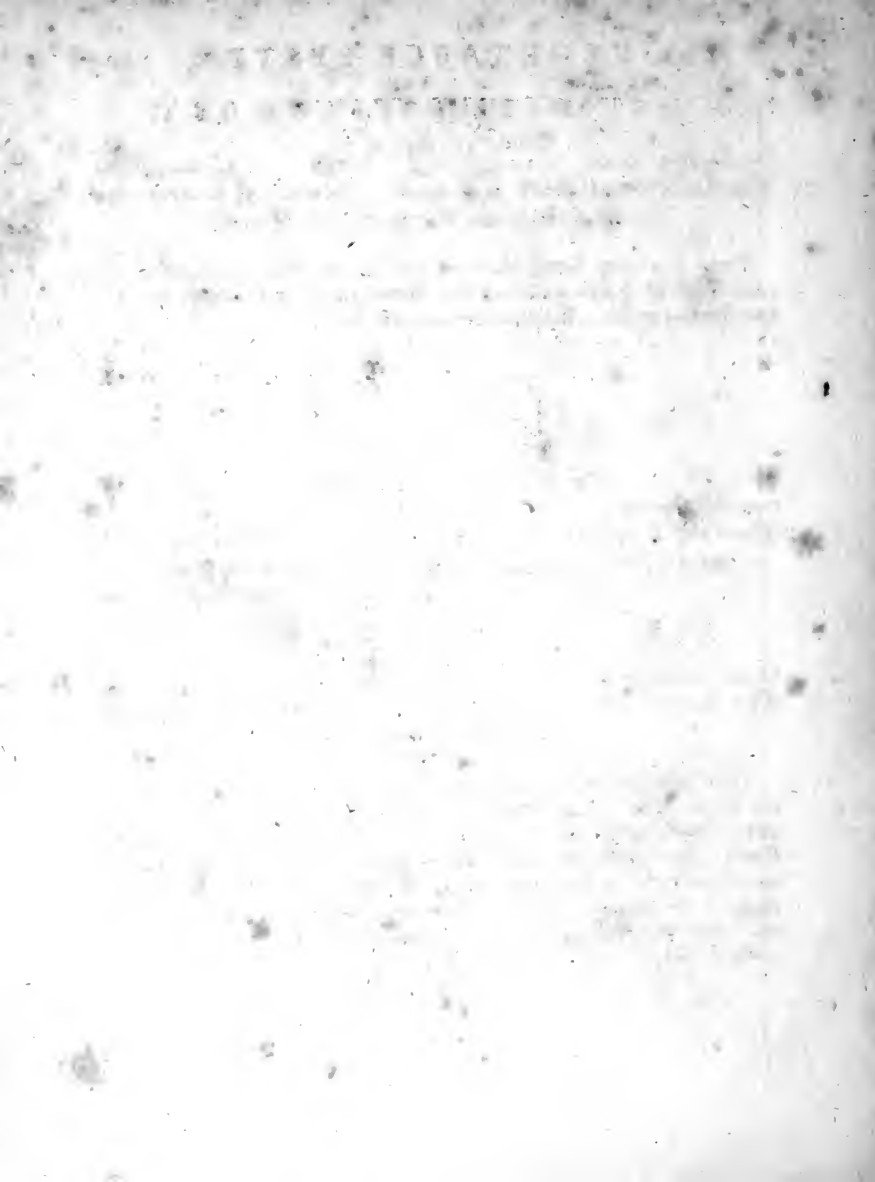
Sharp Nipplewort.



Rugged Nipplewort.



Delicate Nipplewort.



6. DELICATE NIPPLEWORT.

Plate 135. Fig. 6.

Character of the Species.

Lapsana capillaris.

The Stalks are slender and weak : the radical Leaves are lanced : those on the Stalk are spear'd.

Fig. 6. *a b.*

THIS is a very little, delicate and tender Plant, native of the corn-fields of Italy : it is but five inches high : the Leaves are of a fine shining green : the Flowers are yellow.

G E N U S V.

WALL LETTUCE.

P R E N A N T H E S.

Character of the Genus.

The Cup is cylindric : its Scales are long, and only five : the fringe is form'd of three short unequal films.

Plate 136. Fig. *a a b.*

1. IVY-LEAV'D WALL LETTUCE.

Plate 136. Fig. 1.

Character of the Species.

Prenanthes muralis.

The Leaves are harped, and the extream lobe is spread like an Ivy-leaf.

Fig. 1. *a. b.*

THIS is a Biennial, native of our own country, and frequent on old walls, and in damp thickets : it flowers in June : it is two feet and a half high, and is a delicate and well-looking, tho' weedy Plant. The Stalk is slender, and of a purplish brown : the Leaves are naturally of a fine dark green, but they also have frequently a tinge of the same purplish brown : the Flowers are small and yellow, very numerous, and placed in purplish Cups.

2. LINEAR WALL LETTUCE,

Plate 136. Fig. 2.

Character of the Species.

Prenanthes tenuifolia.

The Leaves are very long, narrow, linear and undivided.

Fig. 2. a.

THIS is a Biennial, native of the woods of Spain and Italy, and flowers in July. The Stalk is two feet high, and usually tinged with purple: the Leaves are like grass; and, tho' naturally of a fine green, they have often a tinge of brownish purple. The Flowers are of a delicate crimson.

3. LEAFY WALL LETTUCE.

Plate 136. Fig. 3.

Character of the Species.

Prenanthes viminia.

The Stalk is covered all over with a leafy matter, in thin fine threads.

Fig. 3. a.

THIS is a Biennial, native of Spain and Portugal, and of some parts of the South of France. It is a very singular Plant: the Stalk is naturally brown; but it is covered with green leafy shreds, and is clammy to the touch. The Leaves are of a strong, but not pleasing green: the Flowers are of a pale, but very fine yellow. It flowers in August.

4. LANCED WALL LETTUCE.

Plate 136. Fig. 4.

Character of the Species.

Prenanthes purpurea.

The Leaves are lanced and indented; and only five Florets stand in each cup.

Fig. 4. ab.

THIS



THIS is an Annual, native of the woods of Italy, Germany, and France ; and flowers in July : it is two feet high : the Stalk is slender, but firm and brown. The Leaves are of a deep and blackish green : the Flowers are crimson, with a tinge of purple, a deep, and, tho' a fine, yet not a pleasing colour.

5. TRILOBATE WALL LETTUCE.

Plate 137. Fig. 5.

Character of the Species.

Prenanthes altissima.

The Leaves are formed of three great lobes : the Flowers are only five in a Cup.

Fig. 5. *a b.*

THIS is an Annual, native of Canada and Virginia, a very stately and singular, tho' not handsome Plant : it is five feet high : the Stalk is purple : the Leaves are of a deep shining green : but, as they grow higher up the Stalk, they are less divided and paler : the Flowers are small and yellow.

6. UMBRELLA'D WALL LETTUCE.

Plate 137. Fig. 6.

Character of the Species.

Prenanthes alba.

The Leaves are spear'd and angulated : the Florets are numerous in the Cup.

Fig. 6. *a b.*

THIS is a Biennial, native of Virginia, and flowers in September : the Stalk is upright, firm, and of a deep purple : the Leaves are of a dark and dusky green : the Flowers are of a pure and perfect white.

7. CREEP-

7. CREEPING WALL LETTUCE.

Plate 137. Fig. 7.

Character of the Species.

Prenanthes repens.

The Leaves are irregular and trilobate, and the Plant creeps.

Fig. 7. *ab*.

THIS is a Perennial native of Siberia, and flowers in August: the Stalk is naturally tinged with a deep crimson: the Leaves are of a coarse strong green, and the Flowers are pale yellow.

G E N U S VI.

G U M S U C C O R Y.

Character of the Genus.

The Cup is cylindric, and form'd of numerous, parallel, narrow, linear Scales: the Fringe is form'd of a few, slight and short leafy Films.

Plate *ab*.

OF this Genus we know only one Species.

1. RUSHY GUM SUCCORY.

Plate 137. Fig. 8.

Character of the Species.

Chondrilla juncea.

The radical Leaves are pinnatifid: those on the Stalk are lanced and narrow.

Fig. 8. *ab*.

THIS is a Perennial; a very troublesome Weed about the gardens and vineyards in France and Italy: it is two feet high: the Stalk is slender, upright, and purplish. The Leaves are of a delicate green, and the Flowers are small and yellow: the whole Plant is clammy to the touch.

END OF THE THIRD VOLUME.



Trilobate Wall Lettuce.

GEN-SUCCORY.

Umbrella'd Wall Lettuce.

Generic Character.

Creeping Wall Lettuce.

Rufous Gum-Succory.



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THIRD VOLUME.

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